



Product Catalogue 2023-24

Leading the signal all
over the world

v 1.1



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LEMCO

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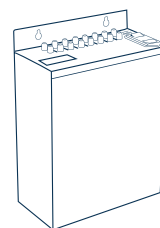
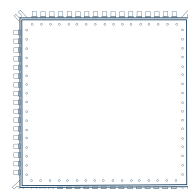
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About LEMCO

Who we are

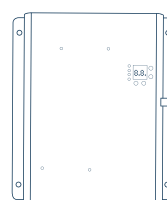
Lemco has over 40 years of experience in designing and manufacturing TV signal broadcast equipment. Renowned for its high standards of quality and wide range of innovative products, it has become established as one of the leading companies in the Greek and European markets. It offers integrated solutions via its wide range product portfolio and technical support services.



What we do

Lemco specializes in the development, production and distribution of professional equipment that process and delivers the TV signal over RF, IP and Fiber optics interfaces as described below:

- DTV RF modulators
- Professional TV headends
- CATV amplifiers, attenuators etc.
- SAT multiswitches
- Fiber Optics distribution solutions (GPON, ONU etc.)
- IPTV middleware
- HDMI products series
- Accessories (i.e. RF splitters, coax cables etc.)





> Our values



Quality

We are dedicated to meeting the needs of our customers and to keeping our promises. Our primary objective is the provision of products of high quality and standards. This is ensured through quality checks at every stage of the production process.



Innovation

We anticipate change and seek to be at the forefront of leading electronics technologies. Ongoing research in conjunction with cutting-edge knowledge and creativity guide us constantly towards new and innovative solutions, aimed at offering more sophisticated and efficient products to our customers.



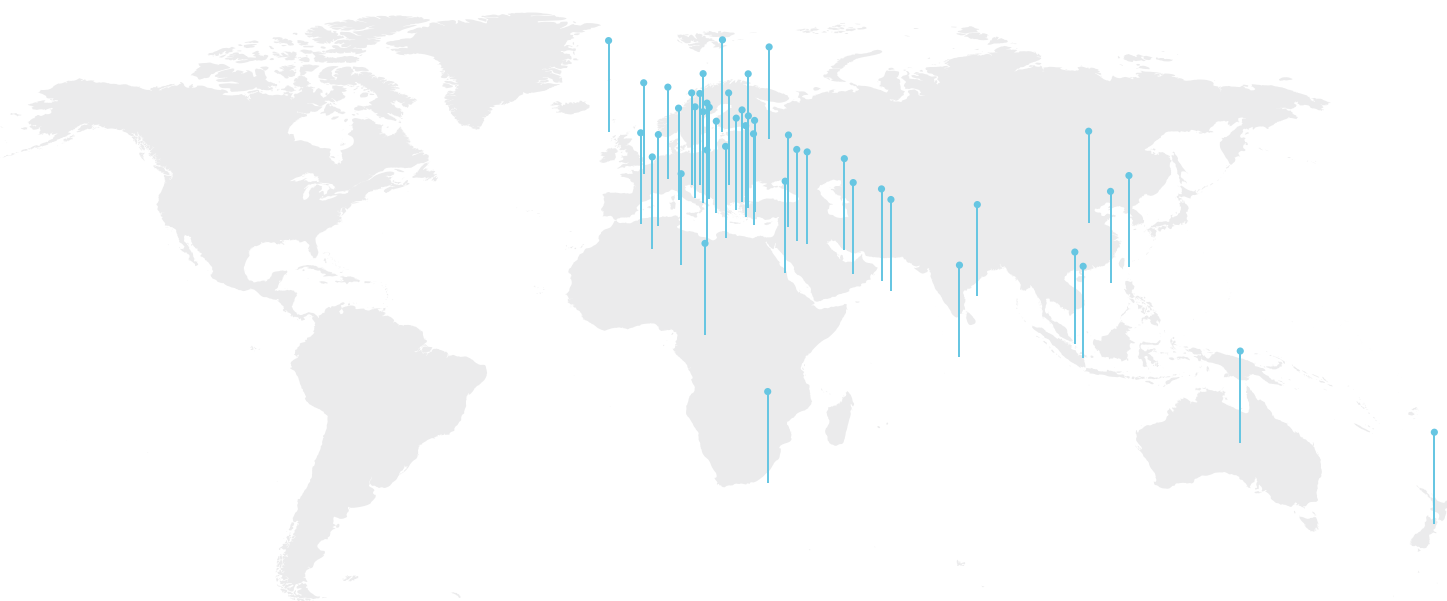
Human Resources

Our philosophy is human-centred, whether it concerns our staff members, customers, partners or suppliers. We promote and support teamwork, embracing each person's diversity. The continuous development of our employees and the provision of equal educational and training opportunities are central to us. Our work environment is characterized by open communication, trust and fair treatment.



Consistency & Reliability

We consider our word a commitment and our promises a priority. Therefore we operate with honesty and integrity, with our principles and values as a compass.



We export to **47** countries.

GREECE
HOLLAND
SPAIN
POLAND
BELGIUM
MALTA
FRANCE
ITALY
CYPRUS
GERMANY
DENMARK
UNITED KINGDOM

CZECH REPUBLIC
IRELAND
LITHUANIA
SLOVAKIA
FINLAND
AUSTRIA
PORTUGAL
CROATIA
HUNGARY
TURKEY
U.A.E.
OMAN

ALBANIA
MOROCCO
SAUDI ARABIA
ICELAND
AUSTRALIA
SWITZERLAND
EGYPT
SINGAPORE
S. AFRICA
LEBANON
MALDIVES
NEW ZEALAND

FYROM
INDIA
MALAYSIA
TUNISIA
NIGERIA
IRAQ
ALGERIA
VIETNAM
NORWAY
CHINA
HONG KONG

Our products are
100% EU
Manufactured



ISO Certifications



ISO 9001:2015

In Lemco we have adopted the standards of the ISO 9001:2015 to all our services, internal organization as well as our product manufacturing in order to provide to our customers unparalleled quality and efficiency in every possible level. Our constant target is to always move forward and provide the highest possible standards of innovative and supreme quality products.



ISO 14001:2015

In Lemco we have adopted the standards of the ISO 14001:2015 for our environmental management system, following our public awareness and our respect for the environment. Our constant effort to provide innovative solutions to the market goes always hand in hand with our ecological sensitivity and responsibility, as we strongly believe that a clean and safe environment is the key to the development of our future.



ISO 45001:2018

In Lemco we have adopted the standards of the ISO 45001:2018 for our workplaces and our company's premises, declaring this way and through our Corporate Social Responsibility (CSR) that we consider our employees as the company's greatest asset. Innovation emanates from people and a safe anthropocentric environment can only promote such new ideas.

Licenses

Our constant target is to always move forward and provide the highest possible standards of innovative and supreme quality products.



HDCP

In **Lemco** we always try to provide products that are not only innovative but also compatible with all the needed standards and for that reason we are an HDCP Licensed Adopter so all the products that we manufacture comply with the terms of the Agreement, including the Compliance and Robustness Rules.



All our innovative **Lemco** products that use the Bluetooth technology have completed the product qualification process and are publicly listed. Through our Bluetooth Adopter Membership, we have the right to develop, manufacture, brand and sell products that utilize the Bluetooth technology.



HDMI

All our innovative **Lemco** products that use the HDMI technology have completed the product qualification process and are publicly listed. Through our HDMI Adopter Membership, we have the right to develop, manufacture, brand and sell products that utilize the HDMI technology.



DVB-T2

Lemco is fully compliant with the standards and patents of the DVB-T2, for all our products that utilize the relevant patents, through the licensing program of the Sisvel company.



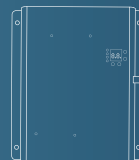
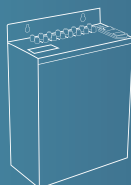
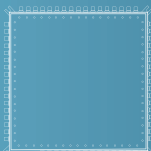
DVB-S2X

Lemco is fully compliant with the standards and patents of the DVB-S2X, for all our products that utilize the relevant patents, through the licensing program of the Sisvel company.



CE

With our **Lemco** products being manufactured exclusively and 100% in house, in our state-of-the-art facilities in Athens, Greece, we proudly affix the CE mark to all our Lemco devices. The high standards of production of an EU made product was, and will always be our banner.



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



HEADENDS

• Proline • Compact Line 2 Gold Edition • Micro Line



TV just got better...



The most **integrated solution**
for hospitality TV

An new product by LEMCO

PROLINE

This comprehensive and advanced product is the epitome of innovation, with a wide range of applications that cover all industry standards (including DVB-S/S2/S2X/T/T2/C/HDMI/IP) and a truly versatile solution that can deliver signals over DVB-T/C and IP simultaneously, making it the perfect choice for the hospitality industry.

At the heart of the Lemco Pro Line is its advanced signal processing capabilities. With its powerful TS multiplexer and 16x inputs and outputs, the Lemco Pro Line is a true industry leader that can process large volumes of data and TV/Radio programs in a single unit, rendering it an exceptional and unparalleled solution for all your signal processing needs. Moreover, the compact 1U Rack mount design is space-saving and efficient, thanks to its cutting-edge design and advanced cooling technology.



PROLINE

PLF-300

16 x DVB-S/S2/T/T2/C to 16 x DVB-T/C & IP



Features

- 16 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLF-300 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) signals, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLF-300 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLF-300 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLF-300, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLF-300 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLF-300 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE PLF-300

16 x DVB-S/S2/T/T2/C
to 16 x DVB-T/C & IP



Input		RF Output	
Type	16 x DVB-S/S2/T/T2/C	Type	16 x DVB-T or 16 x DVB-C RF channels
Frequencies	950...2150 MHz DVB-S/S2		2 groups of 8 adjacent channels in DVB-T
	118...900MHz DVB-T/T2/C		8 groups of 2 adjacent channels in DVB-C
Connector	75Ω - F, female	Output Frequencies	110...900 MHz (10 KHz step)
Loop-through connector	No	Output Level	90dBμV
LNB		Connector	75Ω - F, female
Voltage	OFF / 13V / 18V	Output Attenuator	0...-30dB
Current	Less than 400mA (per input)	DVB-T (OUT)	
22 kHz signal	ON / OFF	Bandwidth	5, 6, 7, 8 MHz
22 kHz signal - Voltage	0.65V ± 0.35V	Mode	2K, 8K
22 kHz signal - Frequency	22 KHz ± 4Hz	Constellation	QPSK, 16QAM, 64QAM
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)	Guard interval	1/4, 1/8, 1/16, 1/32
DVB-S (IN)		Code rate	1/2, 2/3, 3/4, 5/6, 7/8
Symbol rate	1 - 45 MBaud	MER	More than 42dB @ Full Band
Roll off factor	0.35	DVB-C (OUT)	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Spectral inversion	Reverse, Non-reverse (Automatic)	Symbol rate	2.5-8.4 Ms/s
DVB-S2 (IN)		Channel step	3...10MHz
Constellation	QPSK, 8PSK (Automatic)	MER	More than 40dB @ Full Band
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	IP Streaming (OUT)	
Roll off factor	0.2 / 0.35 (Automatic)	IP TS Out	Yes
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic)	Protocol	UDP / RTP (Multicast/Unicast)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	Speed	1 Gbit (800 Mbps in IP only mode)
Spectral inversion	Reverse, Non-reverse (Automatic)	Type	Up to 128 x SPTS or 16 x MPTS
DVB-T (IN)		SDP/SAP Support	Yes
Bandwidth	6, 7, 8 MHz	IP Streaming (IN)	
Mode	2K, 8K	Optional	Requires extra license
Constellation	QPSK, 16QAM, 64QAM	IP TS In	Yes
Guard interval	1/4, 1/8, 1/16, 1/32	Protocol	UDP / RTP (Multicast/Unicast)
Code rate	1/2, 2/3, 3/4, 5/6, 7/8	Speed	1 Gbit (800 Mbps)
DVB-T2 (IN)		Type	Up to 128 x SPTS or 16 x MPTS
Bandwidth	5, 6, 7, 8 MHz	IGMP snooping	Yes, v2 and v3
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)	Programming Interface	
Constellation	QPSK, 16QAM, 64QAM, 256QAM	Operating system	Linux OS
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6	Ethernet webserver	Yes, embedded webserver
Multi PLP support	Yes	Speed	100/1000 Mbps
DVB-C (Annex A,B,C)		Connector	RJ45
Bandwidth	5, 6, 7, 8 MHz	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Mode	Automatic modulation detection	EAN-13	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	Code	5213009761864
Transport Stream Processing		General	
Pool technology support	Yes	Power supply	115...230 VAC
Services	User selection by service names or Service ID	Frequency range	47...63Hz
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables	Number of power supplies	Up to two(2)
NIT	Pass-through, custom, automatic	Hot-swap technology	Yes
Custom NIT/SDT creation	Yes	Power supply consumption	~60VA
PCR	Re-stamping	Operating temperature	0 °C to 40 °C
PCR correction	Yes	Storage temperature	-10 °C to +70 °C
LCN support	Yes	Humidity	Up to 90%
PID filtering	Yes	Dimensions	480 x 295 x 43.5mm
EPG information	Yes over RF and IP	Mounting	1U rack
		Weight	4.45 Kg

PROLINE

PLF-301

16 x DVB-S/S2/S2X to 16 x DVB-T/C & IP

Features

- 16 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-Stream and Multi-PLP support
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLF-301 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2/S2X) signals while supporting multi-stream reception, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLF-300 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLF-301 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLF-301, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

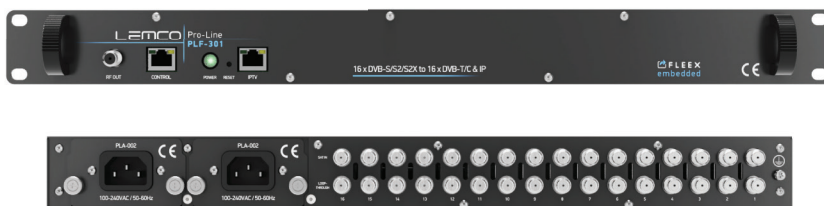
The PLF-301 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLF-301 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE PLF-301

16 x DVB-S/S2/S2X
to 16 x DVB-T/C & IP



Input		RF Output	
Type	16 x DVB-S/S2/S2X	Type	16 x DVB-T or 16 x DVB-C RF channels
Frequencies	950...2150 MHz		2 groups of 8 adjacent channels in DVB-T
			8 groups of 2 adjacent channels in DVB-C
Connector	75Ω - F, female	Output Frequencies	110...900 MHz (10 KHz step)
Loop-through connector	Yes	Output Level	90dBμV
LNB		Connector	75Ω - F, female
Voltage	OFF / 13V / 18V	Output Attenuator	0...-30dB
Current	Less than 400mA (per input)	DVB-T (OUT)	
22 kHz signal	ON / OFF	Bandwidth	5, 6, 7, 8 MHz
22 kHz signal - Voltage	0.65V ± 0.35V	Mode	2K, 8K
22 kHz signal - Frequency	22 KHz ± 4Hz	Constellation	QPSK, 16QAM, 64QAM
22 kHz signal - DiSeqC	1.0 (Port A, B, C, D)	Guard interval	1/4, 1/8, 1/16, 1/32
DVB-S (IN)		Code rate	1/2, 2/3, 3/4, 5/6, 7/8
Symbol rate	1 - 45 MBaud	MER	More than 42dB @ Full Band
Roll off factor	0.35	DVB-C (OUT)	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Spectral inversion	Reverse, Non-reverse (Automatic)	Symbol rate	2.5-8.4 Ms/s
DVB-S2 (IN)		Channel step	3...10MHz
Constellation	QPSK, 8PSK (Automatic)	MER	More than 40dB @ Full Band
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	IP Streaming (OUT)	
Roll off factor	0.2 / 0.35 (Automatic)	IP TS Out	Yes
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic)	Protocol	UDP / RTP (Multicast/Unicast)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	Speed	1 Gbit (800 Mbps in IP only mode)
Spectral inversion	Reverse, Non-reverse (Automatic)	Type	Up to 128 x SPTS or 16 x MPTS
DVB-S2X (IN)		SDP/SAP Support	Yes
Standard	EN302 307-1 V1.4.1	IP Streaming (IN)	
Constellation	QPSK, 8PSK (automatic)	Optional	Requires extra license
Symbol rate	1 - 45 MBaud (QPSK) / 1 - 30 MBaud (8PSK)	IP TS In	Yes
Roll off factor	Ano 0.05 to 0.35 (automatic)	Protocol	UDP / RTP (Multicast/Unicast)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic)	Speed	1 Gbit (800 Mbps)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)	Type	Up to 128 x SPTS or 16 x MPTS
Multi-stream support	Yes	IGMP snooping	Yes, v2 and v3
T2MI MPLP (multiple PLP) signa	Yes	Programming Interface	
Transport Stream Processing		Operating system	Linux OS
Pool technology support	Yes	Ethernet webserver	Yes, embedded webserver
Services	User selection by service names or Service ID	Speed	100/1000 Mbps
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables	Connector	RJ45
NIT	Pass-through, custom, automatic	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Custom NIT/SDT creation	Yes	EAN-13	
PCR	Re-stamping	Code	5213009761871
PCR correction		General	
LCN support	Yes	Power supply	115...230 VAC
PID filtering	Yes	Frequency range	47...63Hz
EPG information	Yes over RF and IP	Number of power supplies	Up to two(2)
		Hot-swap technology	Yes
		Power supply consumption	~60VA
		Operating temperature	0 °C to 40 °C
		Storage temperature	-10 °C to +70 °C
		Humidity	Up to 90%
		Dimensions	480 x 295 x 43.5mm
		Mounting	1U rack
		Weight	4,45 Kg

PROLINE

PLF-200

16 x DVB-S/S2/T/T2/C to IP



Features

- 16 x independent multi-standard inputs DVB-S/S2/T/T2/C
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- PCR re-stamping, Correction
- EPG over IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLF-200 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) signals, the device can convert them into 1x Gbit IPTV streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLF-200 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the IP outputs.

The PLF-200 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLF-200, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLF-200 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLF-200 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE PLF-200

16 x DVB-S/S2/T/T2/C to IP



Input		IP Streaming (OUT)	
Type	16 x DVB-S/S2/T/T2/C	IP TS Out	Yes
Frequencies	950...2150 MHz DVB-S/S2	Protocol	UDP / RTP (Multicast/Unicast)
	118...900MHz DVB-T/T2/C	Speed	1 Gbit (800 Mbps in IP only mode)
Connector	75Ω - F, female	Type	Up to 128 x SPTS or 16 x MPTS
Loop-through connector	No	SDP/SAP Support	Yes
LNB		IP Streaming (IN)	
Voltage	OFF / 13V / 18V	Optional	Requires extra license
Current	Less than 400mA (per input)	IP TS In	Yes
22 kHz signal	ON / OFF	Protocol	UDP / RTP (Multicast/Unicast)
22 kHz signal - Voltage	0.65V ± 0.35V	Speed	1 Gbit (800 Mbps)
22 kHz signal - Frequency	22 KHz ± 4Hz	Type	Up to 128 x SPTS or 16 x MPTS
22 kHz signal - DiSeqC	1.0 (Port A, B, C, D)	IGMP snooping	Yes, v2 and v3
DVB-S (IN)		Programming Interface	
Symbol rate	1 - 45 MBaud	Operating system	Linux OS
Roll off factor	0.35	Ethernet webserver	Yes, embedded webserver
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Speed	100/1000 Mbps
Spectral inversion	Reverse, Non-reverse (Automatic)	Connector	RJ45
DVB-S2 (IN)		Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Constellation	QPSK, 8PSK (Automatic)	EAN-13	
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	Code	5213009761819
Roll off factor	0.2 / 0.35 (Automatic)	General	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK-Automatic)	Power supply	115...230 VAC
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	Frequency range	47...63Hz
Spectral inversion	Reverse, Non-reverse (Automatic)	Number of power supplies	Up to two(2)
DVB-T (IN)		Hot-swap technology	Yes
Bandwidth	6, 7, 8 MHz	Power supply consumption	~60VA
Mode	2K, 8K	Operating temperature	0 °C to 40 °C
Constellation	QPSK, 16QAM, 64QAM	Storage temperature	-10 °C to +70 °C
Guard interval	1/4, 1/8, 1/16, 1/32	Humidity	Up to 90%
Code rate	1/2, 2/3, 3/4, 5/6, 7/8	Dimensions	480 x 295 x 43.5mm
DVB-T2 (IN)		Mounting	1U rack
Bandwidth	5, 6, 7, 8 MHz	Weight	4.35 Kg
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)		
Constellation	QPSK, 16QAM, 64QAM, 256QAM		
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6		
Multi PLP support	Yes		
DVB-C (Annex A,B,C)			
Bandwidth	5, 6, 7, 8 MHz		
Mode	Automatic modulation detection		
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM		
Transport Stream Processing			
Pool technology support	Yes		
Services	User selection by service names or Service ID		
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables		
NIT	Pass-through, custom, automatic		
Custom NIT/SDT creation	Yes		
PCR	Re-stamping		
PCR correction	Yes		
LCN support	Yes		
PID filtering	Yes		
EPG information	Yes over RF and IP		

PROLINE

PLF-201

16 x DVB-S/S2/S2X to IP



Features

- 16 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-Stream and Multi-PLP support
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- PCR re-stamping, Correction
- EPG over IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLF-201 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2/S2X) signals while supporting multi-stream reception, the device can convert them into 1x Gbit IPTV streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLF-201 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the IP outputs.

The PLF-201 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLF-201, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLF-201 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLF-201 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE PLF-201

16 x DVB-S/S2/S2X to IP



Input		IP Streaming (OUT)	
Type	16 x DVB-S/S2/S2X	IP TS Out	Yes
Frequencies	950...2150 MHz	Protocol	UDP / RTP (Multicast/Unicast)
Connector	75Ω - F, female	Speed	1 Gbit (800 Mbps in IP only mode)
Loop-through connector	Yes	Type	Up to 128 x SPTS or 16 x MPTS
LNB		SDP/SAP Support	Yes
Voltage	OFF / 13V / 18V	IP Streaming (IN)	
Current	Less than 400mA (per input)	Optional	Requires extra license
22 kHz signal	ON / OFF	IP TS In	Yes
22 kHz signal - Voltage	0.65V ± 0.35V	Protocol	UDP / RTP (Multicast/Unicast)
22 kHz signal - Frequency	22 KHz ± 4Hz	Speed	1 Gbit (800 Mbps)
22 kHz signal - DiSeqC	1.0 (Port A, B, C, D)	Type	Up to 128 x SPTS or 16 x MPTS
DVB-S (IN)		IGMP snooping	Yes, v2 and v3
Symbol rate	1 - 45 MBaud	Programming Interface	
Roll off factor	0.35	Operating system	Linux OS
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Ethernet webserver	Yes, embedded webserver
Spectral inversion	Reverse, Non-reverse (Automatic)	Speed	100/1000 Mbps
DVB-S2 (IN)		Connector	RJ45
Constellation	QPSK, 8PSK (Automatic)	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	EAN-13	
Roll off factor	0.2 / 0.35 (Automatic)	Code	5213009761826
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	General	
Spectral inversion	Reverse, Non-reverse (Automatic)	Power supply	115...230 VAC
DVB-S2X (IN)		Frequency range	47...63Hz
Standard	EN302 307-1 V1.4.1	Number of power supplies	Up to two(2)
Constellation	QPSK, 8PSK (automatic)	Hot-swap technology	Yes
Symbol rate	1 - 45 MBaud (QPSK) / 1 - 30 MBaud (8PSK)	Power supply consumption	~60VA
Roll off factor	Ano 0.05 to 0.35 (automatic)	Operating temperature	0 °C to 40 °C
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)	Storage temperature	-10 °C to +70 °C
Multi-stream support	Yes	Humidity	Up to 90%
T2MI MPLP (multiple PLP) signa	Yes	Dimensions	480 x 295 x 43.5mm
Transport Stream Processing		Mounting	1U rack
Pool technology support	Yes	Weight	4.35 Kg
Services	User selection by service names or Service ID		
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables		
NIT	Pass-through, custom, automatic		
Custom NIT/SDT creation	Yes		
PCR	Re-stamping		
PCR correction			
LCN support	Yes		
PID filtering	Yes		
EPG information	Yes over RF and IP		

PROLINE

PLC-300

16 x DVB-S/S2/T/T2/C + 8 x FlexCAM
to 16 x DVB-T/C & IP

Features

- 16 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 16 x RF output DVB-T/C (software selectable)
- 8x Common Interfaces (FlexCAM technology)
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLC-300 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) signals, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

The PLC-300 offers unparalleled flexibility in descrambling capabilities. It supports up to 8x Common Interfaces (CI) using the advanced FlexCAM technology, which allows users to connect them to either the inputs or outputs of the multiplexer. This innovative technology provides advanced descrambling flexibility, enabling the user to customize their broadcasting services to meet the unique needs of their audience.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLC-300 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLC-300 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLC-300, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLC-300 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

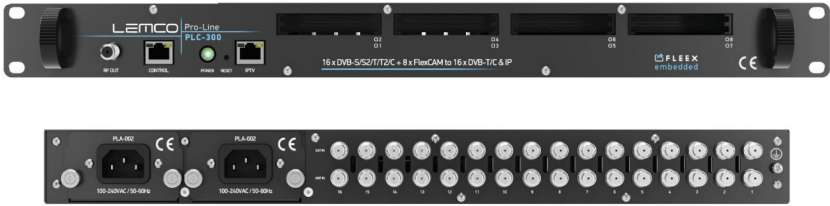
Overall, the PLC-300 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE

PLC-300

16 x DVB-S/S2/T/T2/C + 8 x FlexCAM
to 16 x DVB-T/C & IP



Input	
Type	16 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female
Loop-through connector	No
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 MBaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
CI Interface	
Number of Common Interfaces	8x (in total)
FlexCAM technology	Yes
Connector	PCMCIA (front access)
Max. Frequency	77MHz
DVB-T (IN)	
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T2 (IN)	
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Multi PLP support	Yes
DVB-C (Annex A,B,C)	
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
PCR	Re-stamping
PCR correction	Yes
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	16 x DVB-T or 16 x DVB-C RF channels
	2 groups of 8 adjacent channels in DVB-T 8 groups of 2 adjacent channels in DVB-C
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (800 Mbps in IP only mode)
Type	Up to 128 x SPTS or 16 x MPTS
SDP/SAP Support	Yes
IP Streaming (IN)	
Optional	Requires extra license
IP TS In	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (800 Mbps)
Type	Up to 128 x SPTS or 16 x MPTS
IGMP snooping	Yes, v2 and v3
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761888
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Number of power supplies	Up to two(2)
Hot-swap technology	Yes
Power supply consumption	~65VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	480 x 295 x 43.5mm
Mounting	1U rack
Weight	4,65 Kg

PROLINE

PLC-301

16 x DVB-S/S2/S2X + 8 x FlexCAM
to 16 x DVB-T/C & IP

Features

- 16 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-Stream and Multi-PLP support
- 8x Common Interfaces (FlexCAM technology)
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLC-301 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2/S2X) signals while supporting multi-stream reception, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

The PLC-301 offers unparalleled flexibility in descrambling capabilities. It supports up to 8x Common Interfaces (CI) using the advanced FlexCAM technology, which allows users to connect them to either the inputs or outputs of the multiplexer. This innovative technology provides advanced descrambling flexibility, enabling the user to customize their broadcasting services to meet the unique needs of their audience.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLC-301 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLC-301 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLC-301, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLC-301 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLC-301 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE

PLC-301

16 x DVB-S/S2/S2X + 8 x FlexCAM
to 16 x DVB-T/C & IP



Input	
Type	16 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female
Loop-through connector	Yes
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSeqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 Mbaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 Mbaud (QPSK) - 1 - 30 Mbaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2X (IN)	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 Mbaud (QPSK) / 1 - 30 Mbaud (8PSK)
Roll off factor	Anó 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic)
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Multi-stream support	Yes
T2MI MPLP (multiple PLP) signa	Yes
CI Interface	
Number of Common Interfaces	8x (in total)
FlexCAM technology	Yes
Connector	PCMCIA (front access)
Max. Frequency	77MHz
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
PCR	Re-stamping
PCR correction	Yes
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	16 x DVB-T or 16 x DVB-C RF channels
	2 groups of 8 adjacent channels in DVB-T
	8 groups of 2 adjacent channels in DVB-C
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (800 Mbps in IP only mode)
Type	Up to 128 x SPTS or 16 x MPTS
SDP/SAP Support	Yes
IP Streaming (IN)	
Optional	Requires extra license
IP TS In	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (800 Mbps)
Type	Up to 128 x SPTS or 16 x MPTS
IGMP snooping	Yes, v2 and v3
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761895
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Number of power supplies	Up to two(2)
Hot-swap technology	Yes
Power supply consumption	~65VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	480 x 295 x 43,5mm
Mounting	1U rack
Weight	4,65 Kg

PROLINE

PLC-200

16 x DVB-S/S2/T/T2/C + 8 x FlexCAM to IP

Features

- 16 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 8x Common Interfaces (FlexCAM technology)
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- PCR re-stamping, Correction
- EPG over IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLC-200 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) signals, the device can convert them into 1x Gbit IPTV streaming for distributing FTA TV and Radio programs.

The PLC-200 offers unparalleled flexibility in descrambling capabilities. It supports up to 8x Common Interfaces (CI) using the advanced FlexCAM technology, which allows users to connect them to either the inputs or outputs of the multiplexer. This innovative technology provides advanced descrambling flexibility, enabling the user to customize their broadcasting services to meet the unique needs of their audience.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLC-200 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the IP outputs.

The PLC-200 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLC-200, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLC-200 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLC-200 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE PLC-200

16 x DVB-S/S2/T/T2/C + 8 x FlexCAM to IP



Input		IP Streaming (OUT)	
Type	16 x DVB-S/S2/T/T2/C	IP TS Out	Yes
Frequencies	950...2150 MHz DVB-S/S2	Protocol	UDP / RTP (Multicast/Unicast)
	118...900MHz DVB-T/T2/C	Speed	1 Gbit (800 Mbps in IP only mode)
Connector	75Ω - F, female	Type	Up to 128 x SPTS or 16 x MPTS
Loop-through connector	No	SDP/SAP Support	Yes
LNB		IP Streaming (IN)	
Voltage	OFF / 13V / 18V	Optional	Requires extra license
Current	Less than 400mA (per input)	IP TS In	Yes
22 kHz signal	ON / OFF	Protocol	UDP / RTP (Multicast/Unicast)
22 kHz signal - Voltage	0.65V ± 0.35V	Speed	1 Gbit (800 Mbps)
22 kHz signal - Frequency	22 KHz ± 4Hz	Type	Up to 128 x SPTS or 16 x MPTS
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)	IGMP snooping	Yes, v2 and v3
DVB-S (IN)		Programming Interface	
Symbol rate	1 - 45 MBaud	Operating system	Linux OS
Roll off factor	0.35	Ethernet webserver	Yes, embedded webserver
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Speed	100/1000 Mbps
Spectral inversion	Reverse, Non-reverse (Automatic)	Connector	RJ45
DVB-S2 (IN)		Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Constellation	QPSK, 8PSK (Automatic)	EAN-13	
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	Code	5213009761833
Roll off factor	0.2 / 0.35 (Automatic)	General	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK-Automatic)	Power supply	115...230 VAC
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	Frequency range	47...63Hz
Spectral inversion	Reverse, Non-reverse (Automatic)	Number of power supplies	Up to two(2)
CI Interface		Hot-swap technology	Yes
Number of Common Interfaces	8x (in total)	Power supply consumption	~60VA
FlexCAM technology	Yes	Operating temperature	0 °C to 40 °C
Connector	PCMCIA (front access)	Storage temperature	-10 °C to +70 °C
Max. Frequency	77MHz	Humidity	Up to 90%
DVB-T (IN)		Dimensions	480 x 295 x 43.5mm
Bandwidth	6, 7, 8 MHz	Mounting	1U rack
Mode	2K, 8K	Weight	4.35 Kg
Constellation	QPSK, 16QAM, 64QAM		
Guard interval	1/4, 1/8, 1/16, 1/32		
Code rate	1/2, 2/3, 3/4, 5/6, 7/8		
DVB-T2 (IN)			
Bandwidth	5, 6, 7, 8 MHz		
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)		
Constellation	QPSK, 16QAM, 64QAM, 256QAM		
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6		
Multi PLP support	Yes		
DVB-C (Annex A,B,C)			
Bandwidth	5, 6, 7, 8 MHz		
Mode	Automatic modulation detection		
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM		
Transport Stream Processing			
Pool technology support	Yes		
Services	User selection by service names or Service ID		
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables		
NIT	Pass-through, custom, automatic		
Custom NIT/SDT creation	Yes		
PCR	Re-stamping		
PCR correction	Yes		
LCN support	Yes		
PID filtering	Yes		
EPG information	Yes over RF and IP		

PROLINE

PLC-201

16 x DVB-S/S2/S2X + 8 x FlexCAM to IP

Features

- 16 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-Stream and Multi-PLP support
- 8x Common Interfaces (FlexCAM technology)
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- PCR re-stamping, Correction
- EPG over IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLC-201 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent satellite (DVB-S/S2/S2X) signals while supporting multi-stream reception, the device can convert them into 1x Gbit IPTV streaming for distributing FTA TV and Radio programs.

The PLC-201 offers unparalleled flexibility in descrambling capabilities. It supports up to 8x Common Interfaces (CI) using the advanced FlexCAM technology, which allows users to connect them to either the inputs or outputs of the multiplexer. This innovative technology provides advanced descrambling flexibility, enabling the user to customize their broadcasting services to meet the unique needs of their audience.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLC-201 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the IP outputs.

The PLC-201 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLC-201, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLC-201 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLC-201 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE

PLC-201

16 x DVB-S/S2/S2X + 8 x FlexCAM to IP



Input		IP Streaming (OUT)	
Type	16 x DVB-S/S2/S2X	IP TS Out	Yes
Frequencies	950...2150 MHz	Protocol	UDP / RTP (Multicast/Unicast)
Connector	75Ω - F, female	Speed	1 Gbit (800 Mbps in IP only mode)
Loop-through connector	Yes	Type	Up to 128 x SPTS or 16 x MPTS
LNB		SDP/SAP Support	Yes
Voltage	OFF / 13V / 18V	IP Streaming (IN)	
Current	Less than 400mA (per input)	Optional	Requires extra license
22 kHz signal	ON / OFF	IP TS In	Yes
22 kHz signal - Voltage	0,65V ± 0,35V	Protocol	UDP / RTP (Multicast/Unicast)
22 kHz signal - Frequency	22 KHz ± 4Hz	Speed	1 Gbit (800 Mbps)
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)	Type	Up to 128 x SPTS or 16 x MPTS
DVB-S (IN)		IGMP snooping	Yes, v2 and v3
Symbol rate	1 - 45 MBaud	Programming Interface	
Roll off factor	0.35	Operating system	Linux OS
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)	Ethernet webserver	Yes, embedded webserver
Spectral inversion	Reverse, Non-reverse (Automatic)	Speed	100/1000 Mbps
DVB-S2 (IN)		Connector	RJ45
Constellation	QPSK, 8PSK (Automatic)	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)	EAN-13	
Roll off factor	0.2 / 0.35 (Automatic)	Code	5213009761840
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK-Automatic)	General	
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)	Power supply	115...230 VAC
Spectral inversion	Reverse, Non-reverse (Automatic)	Frequency range	47...63Hz
DVB-S2X (IN)		Number of power supplies	Up to two(2)
Standard	EN302 307-1 V1.4.1	Hot-swap technology	Yes
Constellation	QPSK, 8PSK (automatic)	Power supply consumption	~65VA
Symbol rate	1 - 45 MBaud (QPSK) / 1 - 30 MBaud (8PSK)	Operating temperature	0 °C to 40 °C
Roll off factor	And 0.05 to 0.35 (automatic)	Storage temperature	-10 °C to +70 °C
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic)	Humidity	Up to 90%
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)	Dimensions	480 x 295 x 43,5mm
Multi-stream support	Yes	Mounting	1U rack
T2MI MPLP (multiple PLP) signa	Yes	Weight	4.55 Kg
CI Interface			
Number of Common Interfaces	8x (in total)		
FlexCAM technology	Yes		
Connector	PCMCIA (front access)		
Max. Frequency	77MHz		
Transport Stream Processing			
Pool technology support	Yes		
Services	User selection by service names or Service ID		
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables		
NIT	Pass-through, custom, automatic		
Custom NIT/SDT creation	Yes		
PCR	Re-stamping		
PCR correction	Yes		
LCN support	Yes		
PID filtering	Yes		
EPG information	Yes over RF and IP		

PROLINE

PLH-300

16 x HDMI to 16 x DVB-T/C & IP

Features

- 16 x HDMI inputs
- Full HD H.264 encoding
- HDCP v1.4 support
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLH-300 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent HDMI inputs while supporting HDCP technology, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLH-300 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLH-300 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLH-300, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLH-300 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLH-300 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE

PLH-300

16 x HDMI to 16 x DVB-T/C & IP



Input		IP Streaming (OUT)	
Type	16 x HDMI	IP TS Out	Yes
Video		Protocol	UDP / RTP (Multicast/Unicast)
Video coding	MPEG-4 AVC / H.264	Speed	1 Gbit (800 Mbps in IP only mode)
Profile	High profile 4.0	Type	Up to 16 x SPTS or 16 x MPTS
Input resolution	Up to 1920 1080 - 50/60 p & i	SDP/SAP Support	Yes
Output resolution	Up to 1920 1080 - 30p	IP Streaming (IN)	
HDCP support	Yes, v1.4	Optional	Requires extra license
Audio		IP TS In	Yes
Audio	HD	Protocol	UDP / RTP (Multicast/Unicast)
Standard	MPEG-1 Layer II	Speed	1 Gbit (800 Mbps)
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps	Type	128 x SPTS or 16 x MPTS
Format	MPEG2, AAC, AC3	IGMP snooping	Yes, v2 and v3
H.264 encoder		Programming Interface	
Standard	MPEG-4 AVC / H.264	Operating system	Linux OS
Bit Rate	1 – 19 Mbps adjustable	Ethernet webserver	Yes, embedded webserver
Configurable Parameters	Service Name, Service ID	Speed	100/1000 Mbps
LCN processing	Yes	Connector	RJ45
Transport Stream Processing		Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Pool technology support	Yes	EAN-13	
Services	User selection by service names or Service ID	Code	5213009761901
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables	General	
NIT	Pass-through, custom, automatic	Power supply	115...230 VAC
Custom NIT/SDT creation	Yes	Frequency range	47...63Hz
LCN support	Yes	Number of power supplies	Up to two(2)
PID filtering	Yes	Hot-swap technology	Yes
RF Output		Power supply consumption	~60VA
Type	16 DVB-T or 16 x DVB-C RF channels	Operating temperature	0 °C to 40 °C
	2 groups of 8 adjacent channels in DVB-T	Storage temperature	-10 °C to +70 °C
	8 groups of 2 adjacent channels in DVB-C	Humidity	Up to 90%
Output Frequencies	110...900 MHz (10 KHz step)	Dimensions	480 x 295 x 43.5mm
Output Level	90dBµV	Mounting	1U rack
Connector	75Ω - F, female	Weight	4.20 Kg
Output Attenuator	0...-30dB		
DVB-T (OUT)			
Bandwidth	5, 6, 7, 8 MHz		
Mode	2K, 8K		
Constellation	QPSK, 16QAM, 64QAM		
Guard interval	1/4, 1/8, 1/16, 1/32		
Code rate	1/2, 2/3, 3/4, 5/6, 7/8		
MER	More than 42dB @ Full Band		
DVB-C (OUT)			
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM		
Symbol rate	2.5-8.4 Ms/s		
Channel step	3...10MHz		
MER	More than 40dB @ Full Band		

PROLINE

PLH-200

16 x HDMI to IP

Features

- 16 x HDMI inputs
- Full HD H.264 encoding
- HDCP v1.4 support
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLH-200 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 16 independent HDMI inputs while supporting HDCP technology, the device can convert them into 1x Gbit IPTV streaming for distributing FTA TV and Radio programs.

For IPTV reception applications, the device can receive up to 128x SPTS or 16x MPTS and convert them to 16 DVB-T/C RF output channels with an extra license. The PLH-200 offers unmatched flexibility with its "pool" technology, enabling users to select any program from any of the 16 x inputs and assign it to any of the 16 x RF + IP outputs.

The PLH-200 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLH-200, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLH-200 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLH-200 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE
PLH-200
16 x HDMI to IP



Input		IP Streaming (IN)	
Type	16 x HDMI	Optional	Requires extra license
Video		IP TS In	Yes
Video coding	MPEG-4 AVC / H.264	Protocol	UDP / RTP (Multicast/Unicast)
Profile	High profile 4.0	Speed	1 Gbit (480 Mbps)
Input resolution	Up to 1920 1080 - 50/60 p & i	Type	128 x SPTS or 16 x MPTS
Output resolution	Up to 1920 1080 - 30p	IGMP snooping	Yes, v2 and v3
HDCP support	Yes, v1.4	Programming Interface	
Audio		Operating system	Linux OS
Audio	HD	Ethernet webserver	Yes, embedded webserver
Standard	MPEG-1 Layer II	Speed	100/1000 Mbps
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps	Connector	RJ45
Format	MPEG2, AAC, AC3	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
H.264 encoder		EAN-13	
Standard	MPEG-4 AVC / H.264	Code	5213009761857
Bit Rate	1 – 19 Mbps adjustable	General	
Configurable Parameters	Service Name, Service ID	Power supply	115...230 VAC
LCN processing	Yes	Frequency range	47...63Hz
Transport Stream Processing		Number of power supplies	Up to two(2)
Pool technology support	Yes	Hot-swap technology	Yes
Services	User selection by service names or Service ID	Power supply consumption	~60VA
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables	Operating temperature	0 °C to 40 °C
NIT	Pass-through, custom, automatic	Storage temperature	-10 °C to +70 °C
Custom NIT/SDT creation	Yes	Humidity	Up to 90%
LCN support	Yes	Dimensions	480 x 295 x 43.5mm
PID filtering	Yes	Mounting	1U rack
IP Streaming (OUT)		Weight	4.10 Kg
IP TS Out	Yes		
Protocol	UDP / RTP (Multicast/Unicast)		
Speed	1 Gbit (800 Mbps in IP only mode)		
Type	Up to 16 x SPTS or 16 x MPTS		
SDP/SAP Support	Yes		

PROLINE

PLI-400

IP 128SPTS (UDP/RTP) to 16 x DVB-T/C

Features

- IPTV reception (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- 16 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 128 x SPTS / 16 x MPTS) @ 800Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 1U Rack size
- Dual "Hot pluggable" power supplies
- 5 year warranty



The PLI-400 headend from the Pro Line series is an all-in-one solution that is highly advanced and versatile, designed to meet the changing needs of the broadcasting industry. With the capability to receive up to 128 x SPTS / 16 x MPTS IPTV signals, the device can convert them into 16 DVB-T/C RF output channels while providing 1x Gbit IPTV simultaneously streaming for distributing FTA TV and Radio programs.

The PLI-400 is equipped with a powerful CPU (Quad core @ 1.8GHz / 2GB RAM), responsible for controlling the device using Linux OS while providing a friendly and incredibly fast user interface. It can be remotely or locally controlled via Ethernet, adding to the device's ease of use.

The compact 1U rack size of the PLI-400, combined with its advanced features, ensures that the device consumes the minimal rack space while it has the ability to accept dual "hot-pluggable" power supplies, adding an extra level of reliability and redundancy to ensure the device remains operational even in case of a power supply failure.

The PLI-400 can host an IPTV middleware (Fleex Embedded) without the need for any external server, enabling users to control all TV monitors in an installation, including LG, Samsung, Philips, and custom STBs, while offering a wide range of features such as Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and many more.

Overall, the PLI-400 headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

TECHNICAL SPECIFICATIONS

PROLINE

PLI-400

IP 128SPTS (UDP/RTP) to 16 x DVB-T/C

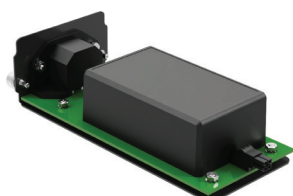
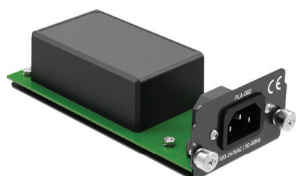


IP Streaming (IN)		IP Streaming (OUT)	
Optional	Requires extra license	IP TS Out	Yes
IP TS In	Yes	Protocol	UDP / RTP (Multicast/Unicast)
Protocol	UDP / RTP (Multicast/Unicast)	Speed	1 Gbit (800 Mbps in IP only mode)
Speed	1 Gbit (800 Mbps)	Type	128 x SPTS or 16 x MPTS
Type	128 x SPTS or 16 x MPTS	SDP/SAP Support	Yes
IGMP snooping	Yes, v2 and v3	Programming Interface	
Transport Stream Processing		Operating system	Linux OS
Pool technology support	Yes	Ethernet webserver	Yes, embedded webserver
Services	User selection by service names or Service ID	Speed	100/1000 Mbps
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables	Connector	RJ45
NIT	Pass-through, custom, automatic	Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
Custom NIT/SDT creation	Yes	EAN-13	
PCR	Re-stamping	Code	5213009761918
PCR correction	Yes	General	
LCN support	Yes	Power supply	115...230 VAC
PID filtering	Yes	Frequency range	47...63Hz
EPG information	Yes over RF and IP	Number of power supplies	Up to two(2)
RF Output		Hot-swap technology	Yes
Type	16 x DVB-T or 16 x DVB-C RF channels	Power supply consumption	~40VA
	2 groups of 8 adjacent channels in DVB-T	Operating temperature	0 °C to 40 °C
	8 groups of 2 adjacent channels in DVB-C	Storage temperature	-10 °C to +70 °C
Output Frequencies	110...900 MHz (10 KHz step)	Humidity	Up to 90%
Output Level	90dBµV	Dimensions	480 x 295 x 43.5mm
Connector	75Ω - F, female	Mounting	1U rack
Output Attenuator	0...-30dB	Weight	3.75 Kg
DVB-T (OUT)			
Bandwidth	5, 6, 7, 8 MHz		
Mode	2K, 8K		
Constellation	QPSK, 16QAM, 64QAM		
Guard interval	1/4, 1/8, 1/16, 1/32		
Code rate	1/2, 2/3, 3/4, 5/6, 7/8		
MER	More than 42dB @ Full Band		
DVB-C (OUT)			
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM		
Symbol rate	2.5-8.4 Ms/s		
Channel step	3...10MHz		
MER	More than 40dB @ Full Band		

PROLINE

PLA-002

External power supply for Pro Line series



The PLA-002 power supply is a highly reliable and efficient device that provides uninterrupted power supply to Pro Line headend series. Despite its compact size, the PLA-002 delivers impressive power output, ensuring that even the most demanding broadcasting operations run smoothly.

Designed with safety in mind, the PLA-002 is equipped with advanced protection features that safeguard against overloading, overheating, and short-circuiting. This ensures that the device remains operational, even in the event of unexpected power surges or failures.

In addition to its impressive technical capabilities, the PLA-002 is also incredibly easy to install and maintain, making it a popular choice among broadcasting professionals.

Input power	
Voltage range	110...240VAC
Frequency range	50/60Hz
Leakage current	< 0.25mA @ 240VAC
Output power	
Voltage	12VDC
Current	6.7A max.
Ripple & Noise	120mVp-p
Protection	
Overload	115-160% rated output power
Over-voltage	12.6-16.2V
Type	Shut-Down, Re-power on to recover
EAN-13	
Code	5213009761932
General	
Vibration	B :10 ~ 500Hz, G 10min./1cycle, period for 60min. lank 2 each along X, Y, Z axes ST:10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes
Safety standards	IEC62368-1, IEC60335-1, Dekra BS EN/EN60335-1, BS EN/EN62368-1, UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved
Operating temperature	0 °C to 60 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	162 x 70 x 41mm
Mounting	Pro Line series
Weight	0.35 Kg

COMPACT LINE 2 GOLD

This versatile and advanced product series is designed to accommodate a wide range of industry standards, including DVB-S/S2/S2X/T/T2/C/HDMI, making it the ideal choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

At the core of the Lemco Compact Line 2 series is its state-of-the-art signal processing capabilities. With multiple inputs and outputs, the Compact Line 2 headends are capable of efficiently processing and distributing large volumes of data and TV/Radio programs, providing a comprehensive and scalable solution for all your signal processing needs. Furthermore, the compact design saves space and ensures efficient operation, thanks to its advanced cooling technology.



COMPACT LINE

SCL-824CT

8 x independent multi-standard inputs
DVB-S/S2/T/T2/C to 4 x DVB-T/C & IP

Features

- 4 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 64 x SPTS / 4 x MPTS) @ 480Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 5 year warranty



The SCL-824CT headend from Lemco's Compact Line 2 series is a highly versatile and efficient all-in-one device designed to accommodate diverse broadcasting needs. Its advanced capabilities include the ability to receive up to 8 independent signals from satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) sources, converting them into 4 DVB-T/C RF output channels while simultaneously offering 1 Gbit IPTV streaming.

The device's innovative "pool" technology allows users to select any program from the 8 inputs and assign it to any of the 4 RF + IP outputs, providing exceptional flexibility in content distribution. Powered by a robust CPU (Quad-core @ 1.8GHz / 2GB RAM) and operating on Linux OS, the SCL-824CT ensures smooth and efficient device control, while offering a user-friendly and highly responsive interface. Additionally, the device can be controlled remotely or locally via Ethernet.

The compact design and impressive features of the SCL-824CT make it the perfect solution for distributing Free-To-Air (FTA) TV programs from various sources (satellite, terrestrial, or cable) to a CATV installation using DVB-T/C and IP technology.

Furthermore, the device is capable of hosting an IPTV middleware (Fleex Embedded) without the need for an external server, enabling users to control all TV monitors in an installation (with support for LG, Samsung, Philips, and custom STBs). This provides a wide range of features, including Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and more.

Overall, the SCL-824CT headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

COMPACT LINE

SCL-824CT

8 x independent multi-standard inputs
DVB-S/S2/T/T2/C to 4 x DVB-T/C & IP



Input	
Type	8 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female
Loop-through connector	No
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 MBaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-T (IN)	
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T2 (IN)	
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Multi PLP support	Yes
DVB-C (Annex A,B,C)	
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
PCR	Re-stamping
PCR correction	Yes
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	4 x DVB-T or 4 x DVB-C RF adjacent channels
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (480 Mbps in IP only mode)
Type	Up to 64 x SPTS or 4 x MPTS
SDP/SAP Support	Yes
RF Matrix	
RF Matrix Support	Yes, optional
Working frequency	350MHz
Number of TVs	Up to 99 TV monitors
Compatible STB	RFM-002
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761291
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Power supply consumption	~55VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.5 x 106mm
Weight	1.70 Kg

COMPACT LINE

SCL-834CT

**8 x independent multi-standard inputs
DVB-S/S2/S2X to 4 x DVB-T/C & IP**

Features

- Multi-stream reception support
- 4 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 64 x SPTS / 4 x MPTS) @ 480Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 5 year warranty



The SCL-834CT headend from Lemco's Compact Line 2 series is a highly versatile and efficient all-in-one device designed to accommodate diverse broadcasting needs. Its advanced capabilities include the ability to receive up to 8 independent signals from satellite (DVB-S/S2/S2X) with multi-stream support, converting them into 4 DVB-T/C RF output channels while simultaneously offering 1 Gbit IPTV streaming.

The device's innovative "pool" technology allows users to select any program from the 8 inputs and assign it to any of the 4 RF + IP outputs, providing exceptional flexibility in content distribution. Powered by a robust CPU (Quad-core @ 1.8GHz / 2GB RAM) and operating on Linux OS, the SCL-834CT ensures smooth and efficient device control, while offering a user-friendly and highly responsive interface. Additionally, the device can be controlled remotely or locally via Ethernet.

The compact design and impressive features of the SCL-834CT make it the perfect solution for distributing Free-To-Air (FTA) TV programs from various satellite sources to a CATV installation using DVB-T/C and IP technology.

Furthermore, the device is capable of hosting an IPTV middleware (Fleex Embedded) without the need for an external server, enabling users to control all TV monitors in an installation (with support for LG, Samsung, Philips, and custom STBs). This provides a wide range of features, including Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and more.

Overall, the SCL-834CT headend is an innovative and powerful device that provides advanced features and flexibility to deliver high-quality TV distribution. It's a great choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

COMPACT LINE

SCL-834CT

8 x independent multi-standard inputs
DVB-S/S2/S2X to 4 x DVB-T/C & IP



Input	
Type	8 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female
Loop-through connector	Yes
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 MBaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2X (IN)	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) / 1 - 30 MBaud (8PSK)
Roll off factor	Anó 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Multi-stream support	Yes
T2MI MPLP (multiple PLP) signa	Yes
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
PCR	Re-stamping
PCR correction	Yes
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	4 x DVB-T or 4 x DVB-C RF adjacent channels
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (480 Mbps in IP only mode)
Type	Up to 64 x SPTS or 4 x MPTS
SDP/SAP Support	Yes
RF Matrix	
RF Matrix Support	Yes, optional
Working frequency	350MHz
Number of TVs	Up to 99 TV monitors
Compatible STB	RFM-002
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761307
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Power supply consumption	~55VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.5 x 106mm
Weight	1.70 Kg

COMPACT LINE

SCL-424CT

**4 x independent multi-standard inputs
DVB-S/S2/T/T2/C to 4 x DVB-T/C & IP**

Features

- 4x Common Interfaces (FlexCAM technology)
- 4 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 64 x SPTS / 4 x MPTS) @ 480Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 5 year warranty



The SCL-424CT headend from Lemco's Compact Line 2 series is an advanced and powerful all-in-one device, designed to meet diverse broadcasting requirements. Capable of receiving up to 4 independent satellite (DVB-S/S2), terrestrial (DVB-T/T2), or cable (DVB-C) signals, it converts them into 4 DVB-T/C RF output channels while simultaneously providing 1 Gbit IPTV streaming.

Featuring 4 CI interfaces with FlexCAM technology, the SCL-424CT can descramble various TV content using the appropriate CAM (Conditional Access Module). Its innovative "pool" technology allows users to select any program from the 4 inputs and assign it to any of the 4 RF + IP outputs, ensuring exceptional flexibility in content distribution.

Powered by a robust CPU (Quad-core @ 1.8GHz / 2GB RAM) and operating on Linux OS, the SCL-424CT guarantees efficient device control and offers a user-friendly, highly responsive interface. Additionally, the device can be managed remotely or locally via Ethernet. With its compact design and impressive features, the SCL-424CT is an ideal solution for distributing Free-To-Air (FTA) TV programs from various sources (satellite, terrestrial, or cable) to a CATV installation using DVB-T/C and IP technology.

Furthermore, the SCL-424CT can host an IPTV middleware (Fleex Embedded) without requiring an external server, allowing users to control all TV monitors in an installation (compatible with LG, Samsung, Philips, and custom STBs). This provides a wide range of features, including Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and more.

Overall, the SCL-424CT headend is a sophisticated and versatile device that delivers top-quality TV distribution, making it an excellent choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

COMPACT LINE

SCL-424CT

4 x independent multi-standard inputs
DVB-S/S2/T/T2/C to 4 x DVB-T/C & IP



Input	
Type	4 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female
Loop-through connector	No
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 MBaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
CI Interface	
Number of Common Interfaces	4x (in total)
FlexCAM technology	Yes
Connector	PCMCIA
Max. Frequency	75MHz or 85,70MHz
DVB-T (IN)	
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T2 (IN)	
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Multi PLP support	Yes
DVB-C (Annex A,B,C)	
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
PCR	Re-stamping
PCR correction	Yes
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	4 x DVB-T or 4 x DVB-C RF adjacent channels
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (480 Mbps in IP only mode)
Type	Up to 64 x SPTS or 4 x MPTS
SDP/SAP Support	Yes
RF Matrix	
RF Matrix Support	Yes, optional
Working frequency	350MHz
Number of TVs	Up to 99 TV monitors
Compatible STB	RFM-002
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761314
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Power supply consumption	~55VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.5 x 106mm
Weight	1.70 Kg

COMPACT LINE

SCL-434CT

**4 x independent multi-standard inputs
DVB-S/S2/S2X to 4 x DVB-T/C & IP**

Features

- Multi-stream reception support
- 4x Common Interfaces (FlexCAM technology)
- 4 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 64 x SPTS / 4 x MPTS) @ 480Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- PCR re-stamping, Correction
- EPG over RF and IP
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 5 year warranty



The SCL-434CT headend from Lemco's Compact Line 2 series is a highly versatile and efficient all-in-one device designed to accommodate diverse broadcasting needs. Its advanced capabilities include the ability to receive up to 4 independent signals from satellite (DVB-S/S2/S2X) with multi-stream support, converting them into 4 DVB-T/C RF output channels while simultaneously offering 1 Gbit IPTV streaming.

Featuring 4 CI interfaces with FlexCAM technology, the SCL-434CT can descramble various TV content using the appropriate CAM (Conditional Access Module). Its innovative "pool" technology allows users to select any program from the 4 inputs and assign it to any of the 4 RF + IP outputs, ensuring exceptional flexibility in content distribution.

Powered by a robust CPU (Quad-core @ 1.8GHz / 2GB RAM) and operating on Linux OS, the SCL-434CT guarantees efficient device control and offers a user-friendly, highly responsive interface. Additionally, the device can be managed remotely or locally via Ethernet. With its compact design and impressive features, the SCL-434CT is an ideal solution for distributing satellite TV programs from various sources to a CATV installation using DVB-T/C and IP technology.

Furthermore, the SCL-434CT can host an IPTV middleware (Fleex Embedded) without requiring an external server, allowing users to control all TV monitors in an installation (compatible with LG, Samsung, Philips, and custom STBs). This provides a wide range of features, including Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and more.

Overall, the SCL-434CT headend is a sophisticated and versatile device that delivers top-quality TV distribution, making it an excellent choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

COMPACT LINE

SCL-434CT

4 x independent multi-standard inputs
DVB-S/S2/S2X to 4 x DVB-T/C & IP



Input	
Type	4 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female
Loop-through connector	Yes
LNB	
Voltage	OFF / 13V / 18V
Current	Less than 400mA (per input)
22 kHz signal	ON / OFF
22 kHz signal - Voltage	0.65V ± 0.35V
22 kHz signal - Frequency	22 KHz ± 4Hz
22 kHz signal - DiSEqC	1.0 (Port A, B, C, D)
DVB-S (IN)	
Symbol rate	1 - 45 MBaud
Roll off factor	0.35
Code rate	1/2, 2/3, 3/4, 5/6, 7/8 (Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2 (IN)	
Constellation	QPSK, 8PSK (Automatic)
Symbol rate	1 - 45 MBaud (QPSK) - 1 - 30 MBaud (8PSK)
Roll off factor	0.2 / 0.35 (Automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK-Automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK-Automatic)
Spectral inversion	Reverse, Non-reverse (Automatic)
DVB-S2X (IN)	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) / 1 - 30 MBaud (8PSK)
Roll off factor	Ano 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Multi-stream support	Yes
T2MI MPLP (multiple PLP) signa	Yes
CI Interface	
Number of Common Interfaces	4x (in total)
FlexCAM technology	Yes
Connector	
Max. Frequency	75MHz or 85,70MHz
Transport Stream Processing	
Pool technology support	Yes
Services	
Automatic regeneration	User selection by service names or Service ID
NIT	PAT, CAT, SDT, PMTs, EITs tables
Custom NIT/SDT creation	Pass-through, custom, automatic
PCR	Yes
PCR correction	Re-stamping
LCN support	Yes
PID filtering	Yes
EPG information	Yes over RF and IP

RF Output	
Type	4 x DVB-T or 4 x DVB-C RF adjacent channels
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band
IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (480 Mbps in IP only mode)
Type	Up to 64 x SPTS or 4 x MPTS
SDP/SAP Support	Yes
RF Matrix	
RF Matrix Support	Yes, optional
Working frequency	350MHz
Number of TVs	Up to 99 TV monitors
Compatible STB	RFM-002
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761321
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Power supply consumption	~55VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.5 x 106mm
Weight	1.70 Kg

COMPACT LINE

HCL-824CT

8 x HDMI inputs to 4 x DVB-T/C & IP

Features

- Full HD H.264 encoding
- HDCP v1.4 support
- 4 x RF output DVB-T/C (software selectable)
- MER value > 45dB
- IPTV streaming (up to 8 x SPTS / 4 x MPTS) @ 480Mbps
- SAP/SDP support
- "Pool" technology
- PID Filtering
- Custom NIT/SDT support
- Very friendly user interface
- Fleex Embedded support (IPTV middleware)
- 5 year warranty



The HCL-824CT headend from Lemco's Compact Line 2 series is a state-of-the-art, all-in-one device designed to accommodate a wide range of broadcasting needs. With the ability to receive up to 8x HDMI signals, it efficiently converts them into 4 DVB-T/C RF output channels while simultaneously providing 1 Gbit IPTV streaming.

Leveraging "pool" technology, the HCL-824CT allows users to select any program from the 8 inputs and assign it to any of the 4 RF + IP outputs, ensuring unparalleled flexibility in content distribution. Equipped with a powerful CPU (Quad-core @ 1.8GHz / 2GB RAM) and operating on Linux OS, the device offers smooth and efficient control, along with a user-friendly and highly responsive interface. It can also be managed remotely or locally via Ethernet.

The compact design and impressive features of the HCL-824CT make it the perfect solution for distributing HDMI content, such as from set-top boxes or Blu-ray sources, to a CATV installation using DVB-T/C and IP technology.

Additionally, the HCL-824CT can host an IPTV middleware (Fleex Embedded) without the need for an external server, enabling users to control all TV monitors in an installation (compatible with LG, Samsung, Philips, and custom STBs). This offers a diverse range of features, including Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG, and more.

Overall, the HCL-824CT headend is a sophisticated and versatile device that delivers high-quality TV distribution, making it an excellent choice for cable TV companies, IPTV providers, hotels, hospitals, and other similar installations.

COMPACT LINE

HCL-824CT

8 x HDMI inputs to 4 x DVB-T/C & IP



Input	
Type	8 x HDMI
Video	
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4
Audio	
Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3
H.264 encoder	
Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes
Transport Stream Processing	
Pool technology support	Yes
Services	User selection by service names or Service ID
Automatic regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT	Pass-through, custom, automatic
Custom NIT/SDT creation	Yes
LCN support	Yes
PID filtering	Yes
RF Output	
Type	4 x DVB-T or 4 x DVB-C RF adjacent channels
Output Frequencies	110...900 MHz (10 KHz step)
Output Level	90dBµV
Connector	75Ω - F, female
Output Attenuator	0...-30dB
DVB-T (OUT)	
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
MER	More than 42dB @ Full Band
DVB-C (OUT)	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	2.5-8.4 Ms/s
Channel step	3...10MHz
MER	More than 40dB @ Full Band

IP Streaming (OUT)	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1 Gbit (480 Mbps in IP only mode)
Type	Up to 8 x SPTS or 4 x MPTS
SDP/SAP Support	Yes
RF Matrix	
RF Matrix Support	Yes, optional
Working frequency	350MHz
Number of TVs	Up to 99 TV monitors
Compatible STB	RFM-002
Programming Interface	
Operating system	Linux OS
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge et al.
EAN-13	
Code	5213009761338
General	
Power supply	115...230 VAC
Frequency range	47...63Hz
Power supply consumption	~55VA
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.5 x 106mm
Weight	1.70 Kg

5 years
warranty



LEMCO

www.lemco.gr

MICRO LINE

Mini headend series consisting of three sub-families (FTA, CI and HDMI) with a total of 18 different models able to cover any kind of small to medium installations in a reasonable cost.



FTA series

MLF-100

4 x DVB-S/S2/T/T2/C to 4 x DVB-T/C

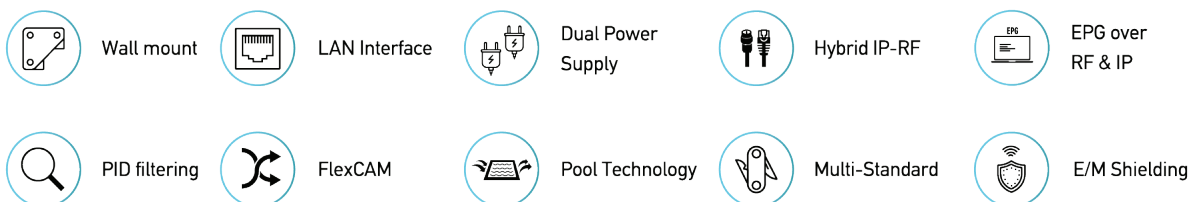
The MLF-100 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in four (4) x DVB-T/C RF output channels. It supports "pool" technology, meaning that the user is able to select any program from any of the 4 inputs and assign it to any of the four (4) RF providing great flexibility.

The embedded web server of the MLF-100 provides a very friendly user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and its powerful features renders the MLF-100 the ideal solution in cases we want to distribute FTA (Free-To-Air) TV programs coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 4 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 4 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	4 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-T	
Standard	EN 300-744 V1.6.1
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-T2 / T2 Lite	
Standard	EN 302-755 V1.3.1
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6

ITU-T J.83	
Standard	Annex A(DVB-C), B(US cable),C
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83	
Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output	
Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode:	Yes

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760102

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



FTA series

MLF-101

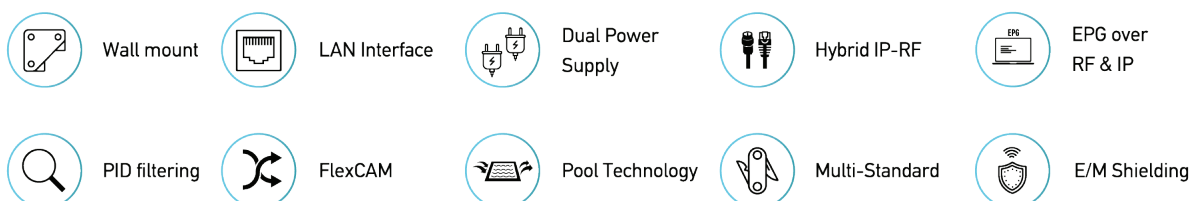
4 x DVB-S/S2/S2X to 4 x DVB-T/C

The MLF-101 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels. and convert them in four (4) x DVB-T/C RF output channels. It supports "pool" technology, meaning that the user is able to select any program from any of the 4 inputs and assign it to any of the four (4) RF providing great flexibility. The embedded web server of the MLF-101 provides a very friendly user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and its powerful features renders the MLF-101 the ideal solution in cases we want to distribute FTA (Free-To-Air) TV programs coming from (DVB-S/S2/S2X) sources to a CATV installation using the DVB-T/C.

Features

- 4 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 4 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB

Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S

Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2

Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X

Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	From 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

DVB-T

Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83

Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode:	Yes

Programming Interface

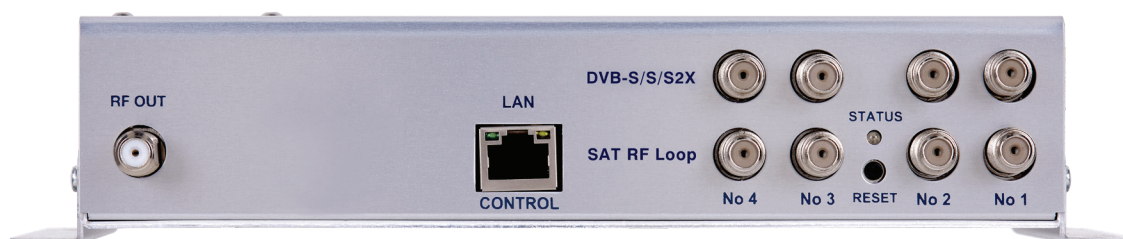
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

EAN-13

Code	5213009760119
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General

Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



FTA series

MLF-200

4 x DVB-S/S2/T/T2/C to IP

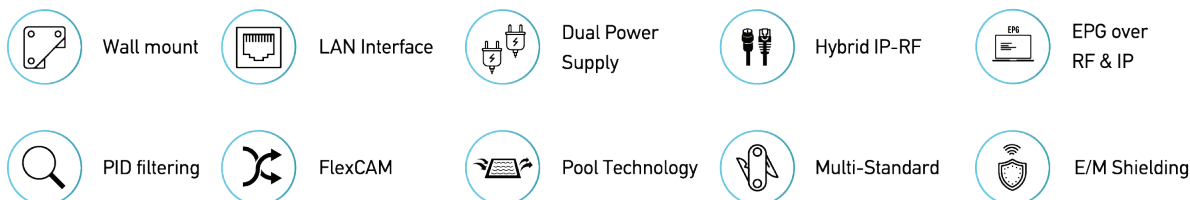
The MLF-200 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the four (4) inputs and assign it to any of the four (4) IP outputs providing great flexibility.

The embedded web server of the MLF-200 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLF-200 the ideal solution in cases we want to distribute FTA (Free-To-Air) coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using IP technology.

Features

- 4 x independent multi-standard inputs DVB-S/S2/T/T2/C
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- PID Filtering
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input		
Type	4 x DVB-S/S2/T/T2/C	
Frequencies	950...2150 MHz	DVB-S/S2
	118...900MHz	DVB-T/T2/C
Connector	75Ω - F, female	

LNB

Voltage	OFF / 13V / 18V	
Current	< 400mA	
22 KHz signal	On / Off	
-Voltage	0.65V ±0.35V	
-Frequency	22 KHz ±4Hz	
-DiSEqC	1.0 (Port A, B, C, D)	

DVB-S

Standard	EN 300-421 V1.1.2	
Symbol Rate	1 - 55 MBaud	
Roll off factor	0.2, 0.25, 0.35	
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)	
Spectral Inversion	Reverse, Non-reverse (automatic)	

DVB-S2

Standard	EN 307-421 V1.2.1	
Constellation	QPSK, 8PSK (automatic)	
Symbol rate	1 - 55 MBaud (QPSK)	
	1 - 45 MBaud (8PSK)	
Roll off factor	0.2, 0.25, 0.35 (automatic)	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic)	
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)	
Spectral inversion	Reverse, Non-reverse (automatic)	

DVB-T

Standard	EN 300-744 V1.6.1	
Bandwidth	6, 7, 8 MHz	
Mode	2K, 8K	
Constellation	QPSK, 16QAM, 64QAM	
Guard interval	1/4, 1/8, 1/16, 1/32	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8	

DVB-T2 / T2 Lite

Standard	EN 302-755 V1.3.1	
Bandwidth	5, 6, 7, 8 MHz	
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)	
Constellation	QPSK, 16QAM, 64QAM, 256QAM	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6	

ITU-T J.83

Standard	Annex A(DVB-C), B(US cable),C
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM

Output Specifications

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
PCR	re-stamping
Bypass Mode:	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13

Code	5213009760164
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General

Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



FTA series

MLF-201

4 x DVB-S/S2/S2X to IP

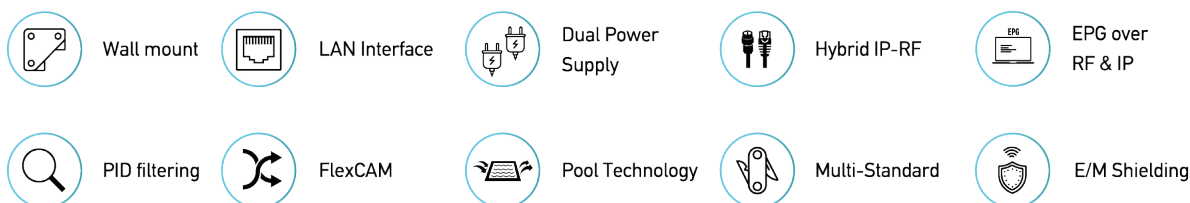
The MLF-201 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the four (4) inputs and assign it to any of the four (4) IP outputs providing great flexibility.

The embedded web server of the MLF-201 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLF-201 the ideal solution in cases we want to distribute FTA (Free-To-Air) coming from satellite (DVB-S/S2/S2X) sources to a CATV installation using IP technology.

Features

- 4 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- PID Filtering
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	4 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	Ano 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
PCR	re-stamping
Bypass Mode:	Yes

IP Streaming	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760171

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



FTA series

MLF-300

4 x DVB-S/S2/T/T2/C to 4 x DVB-T/C + IP

The MLF-300 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in four (4) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. It supports "pool" technology, meaning that the user is able to select any program from any of the 4 inputs and assign it to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLF-300 provides a very friendly user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and its powerful features renders the MLF-300 the ideal solution in cases we want to distribute FTA (Free-To-Air) TV programs coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 4 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Wall mount



LAN Interface



Dual Power Supply



Hybrid IP-RF



EPG over RF & IP



PID filtering



FlexCAM



Pool Technology



Multi-Standard



E/M Shielding



Input Specifications

Input		
Type	4 x DVB-S/S2/T/T2/C	
Frequencies	950...2150 MHz	DVB-S/S2
	118...900MHz	DVB-T/T2/C
Connector	75Ω - F, female	

LNB		
Voltage	OFF / 13V / 18V	
Current	< 400mA	
22 KHz signal	On / Off	
-Voltage	0.65V ±0.35V	
-Frequency	22 KHz ±4Hz	
-DiSEqC	1.0 (Port A, B, C, D)	

DVB-S		
Standard	EN 300-421 V1.1.2	
Symbol Rate	1 - 55 MBaud	
Roll off factor	0.2, 0.25, 0.35	
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)	
Spectral Inversion	Reverse, Non-reverse (automatic)	

DVB-S2		
Standard	EN 307-421 V1.2.1	
Constellation	QPSK, 8PSK (automatic)	
Symbol rate	1 - 55 MBaud (QPSK)	
	1 - 45 MBaud (8PSK)	
Roll off factor	0.2, 0.25, 0.35 (automatic)	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic)	
	3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)	
Spectral inversion	Reverse, Non-reverse (automatic)	

DVB-T		
Standard	EN 300-744 V1.6.1	
Bandwidth	6, 7, 8 MHz	
Mode	2K, 8K	
Constellation	QPSK, 16QAM, 64QAM	
Guard interval	1/4, 1/8, 1/16, 1/32	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8	

DVB-T2 / T2 Lite		
Standard	EN 302-755 V1.3.1	
Bandwidth	5, 6, 7, 8 MHz	
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)	
Constellation	QPSK, 16QAM, 64QAM, 256QAM	
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6	

ITU-T J.83		
Standard	Annex A(DVB-C), B(US cable),C	
Bandwidth	5, 6, 7, 8 MHz	
Mode	Automatic modulation detection	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	

Output Specifications

DVB-T		
Standard	EN 300-744	
Bandwidth	5, 6, 7, 8 MHz	
Mode	2K, 8K	
Constellation	QPSK, 16QAM, 64QAM	
Guard interval	1/4, 1/8, 1/16, 1/32	
Code rate	1/2, 2/3, 3/4, 5/6, 7/8	

ITU-T J.83		
Standard	Annex A(DVB-C)	
Bandwidth	5, 6, 7, 8 MHz	
Mode	2K, 8K	
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	
Symbol rate	1-7.2 Ms/s	

RF Output		
Type	4 x RF out in adjacent channels	
Output Frequencies	110...950 MHz (1 Hz step)	
Output Level	90dBμV	
Connector	75Ω - F, female	
Output Attenuator	0...-20dB	
MER	>42dB	
Output loop-through loss	<1dB	

Transport Stream Processing		
Services	User selection by service names	
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables	
NIT/SDT	Pass-through, custom, automatic	
PCR	re-stamping	
LCN support	Yes	
Bypass Mode:	Yes	

IP Streaming		
IP TS Out	Yes	
Protocol	UDP / RTP (Multicast/Unicast)	
Speed	1Gbit	
IGMP support	Yes, v2, v3	
Type	MPTS (up to 4 TS)	
	SPTS (up to 64 programs)	
Max. Bitrate	480Mbps max. (in IP only mode)	

Programming Interface		
Ethernet webserver	Yes, embedded webserver	
Speed	10/100 Mbps	
Connector	RJ45	
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)	

EAN-13		
Code	5213009760225	

General		
Power Supply	2 x +12VDC	
Power supply consumption	1.8A max.	
Operating Temperature	0 °C to 40 °C	
Storage Temperature	-10 °C to +70 °C	
Humidity	Up to 90%	
Dimensions	235 x 115 x 48 mm	
Weight	0.45 Kg	



FTA series

MLF-301

4 x DVB-S/S2/S2X to 4 x DVB-T/C + IP

The MLF-301 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in four (4) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. It supports "pool" technology, meaning that the user is able to select any program from any of the 4 inputs and assign it to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLF-301 provides a very friendly user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and its powerful features renders the MLF-301 the ideal solution in cases we want to distribute FTA (Free-To-Air) TV programs coming from satellite coming from (DVB-S/S2/S2X) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 4 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Wall mount



LAN Interface



Dual Power Supply



Hybrid IP-RF



EPG over RF & IP



PID filtering



FlexCAM



Pool Technology



Multi-Standard



E/M Shielding



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	From 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83

Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode:	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface

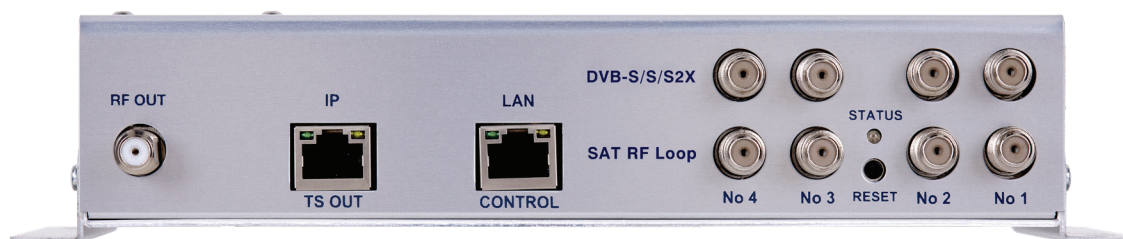
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera Edge etc. (Must support HTML v5.0)

EAN-13

Code	5213009760232
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General

Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-100

2 x DVB-S/S2/T/T2/C + 2 x FlexCAM to 4 x DVB-T/C

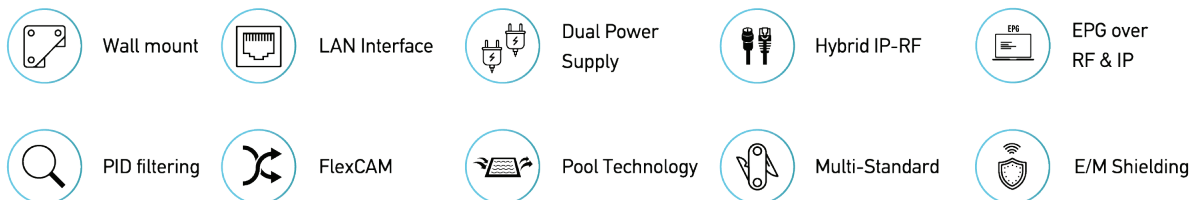
The MLC-100 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4 x DVB-T/C RF output channels. The MLC-100 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) RF outputs providing great flexibility.

The embedded web server of the MLC-100 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-100 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using the DVB-T/C.

Features

- 2 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 2x CI interfaces using FlexCAM technology
- 4 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSeqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-T	
Standard	EN 300-744 V1.6.1
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-T2 / T2 Lite	
Standard	EN 302-755 V1.3.1
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6

ITU-T J.83	
Standard	Annex A(DVB-C), B(US cable),C
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83	
Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output	
Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode:	Yes

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760089

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-101

2 x DVB-S/S2/S2X + 2 x FlexCAM to 4 x DVB-T/C

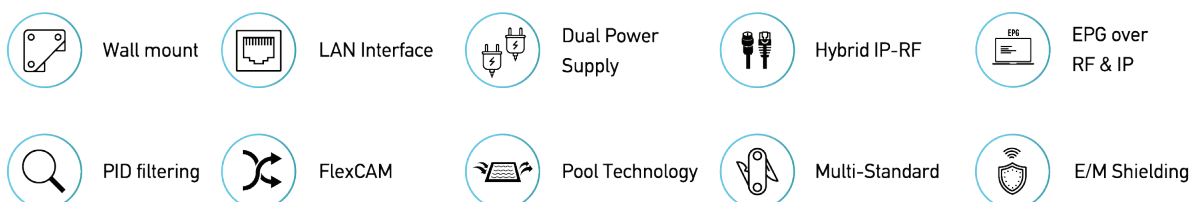
The MLC-101 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels. The MLC-101 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) RF outputs providing great flexibility.

The embedded web server of the MLC-101 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-101 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2/S2X) sources to a CATV installation using the DVB-T/C.

Features

- 2 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 2x CI interfaces using FlexCAM technology
- 4 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	Anó 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83	
Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

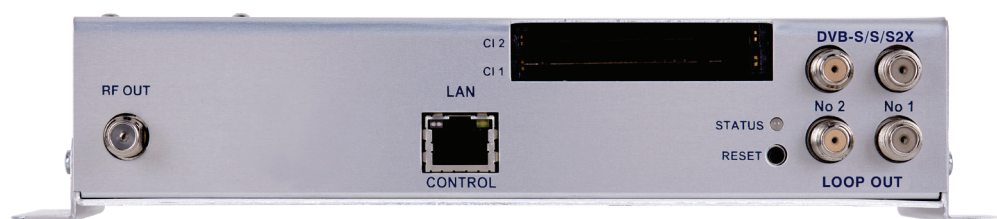
RF Output	
Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode:	Yes

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760096

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-200

2 x DVB-S/S2/T/T2/C + 2 x FlexCAM to IP

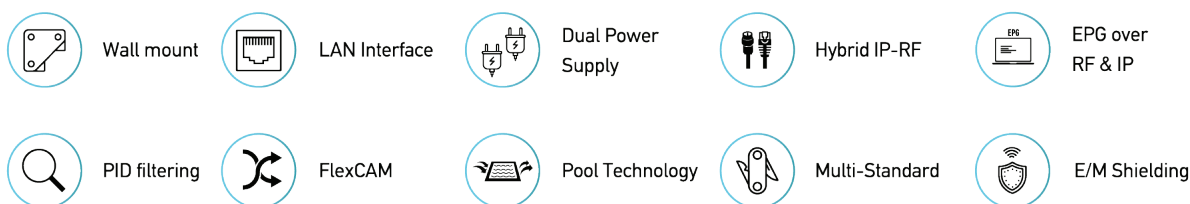
The MLC-200 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-200 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) IP outputs providing great flexibility.

The embedded web server of the MLC-200 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-200 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using IP technology.

Features

- 2 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 2x CI interfaces using FlexCAM technology
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- PID Filtering
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input		
Type	2 x DVB-S/S2/T/T2/C	
Frequencies	950...2150 MHz	DVB-S/S2
	118...900MHz	DVB-T/T2/C
Connector	75Ω - F, female	

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-T	
Standard	EN 300-744 V1.6.1
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-T2 / T2 Lite	
Standard	EN 302-755 V1.3.1
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6

ITU-T J.83

Standard	Annex A(DVB-C), B(US cable),C
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM

Output Specifications

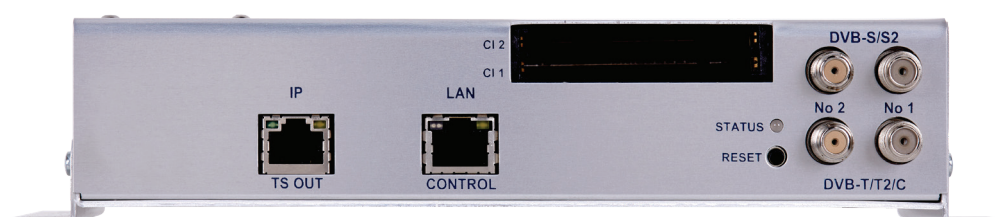
Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
PCR	re-stamping
Bypass Mode:	Yes

IP Streaming	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max.

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760140

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-201

2 x DVB-S/S2/S2X + 2 x FlexCAM to IP

The MLC-201 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X), signals supporting multistream reception and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-201 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) IP outputs providing great flexibility.

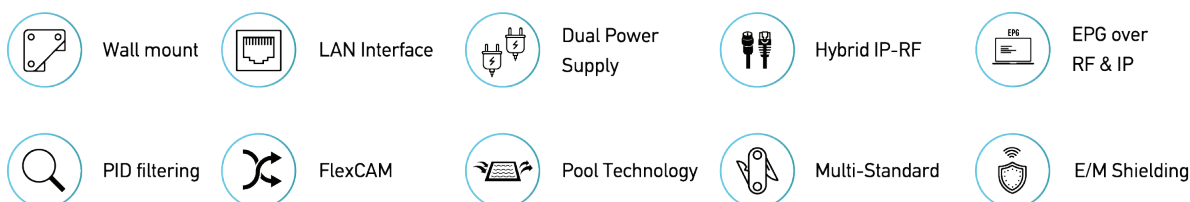
The embedded web server of the MLC-201 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-201 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV

programs coming from satellite (DVB-S/S2/S2X) sources to a CATV installation using IP technology.

Features

- 2 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 2x CI interfaces using FlexCAM technology
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- PID Filtering
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	Anó 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

IP Streaming	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max.

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13	
Code	5213009760157

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-300

2 x DVB-S/S2/T/T2/C + 2 x FlexCAM to 4 x DVB-T/C or IP

The MLC-300 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-300 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLC-300 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-300 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 2 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 2x CI interfaces using FlexCAM technology
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Wall mount



LAN Interface



Dual Power Supply



Hybrid IP-RF



EPG over RF & IP



PID filtering



FlexCAM



Pool Technology



Multi-Standard



E/M Shielding



Input Specifications

Input	
Type	2 x DVB-S/S2/T/T2/C
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-T	
Standard	EN 300-744 V1.6.1
Bandwidth	6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-T2 / T2 Lite	
Standard	EN 302-755 V1.3.1
Bandwidth	5, 6, 7, 8 MHz
Mode	1K, 2K, 4K, 8K, 16K, 32K (Included extended mode)
Constellation	QPSK, 16QAM, 64QAM, 256QAM
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6

ITU-T J.83	
Standard	Annex A(DVB-C), B(US cable),C
Bandwidth	5, 6, 7, 8 MHz
Mode	Automatic modulation detection
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83	
Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output	
Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing	
Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode	Yes

IP Streaming	
IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface	
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

EAN-13	
Code	5213009760201

General	
Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-301

2 x DVB-S/S2/S2X + 2 x FlexCAM to 4 x DVB-T/C or IP

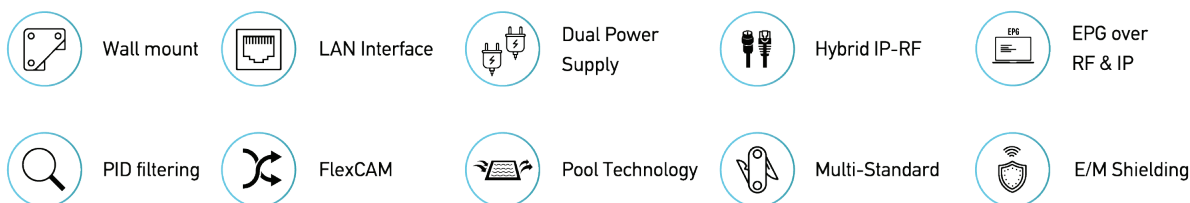
The MLC-301 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-301 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLC-301 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-301 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2/S2X) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 2 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 2x CI interfaces using FlexCAM technology
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB

Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S

Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2

Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X

Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	From 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

DVB-T

Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83

Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface

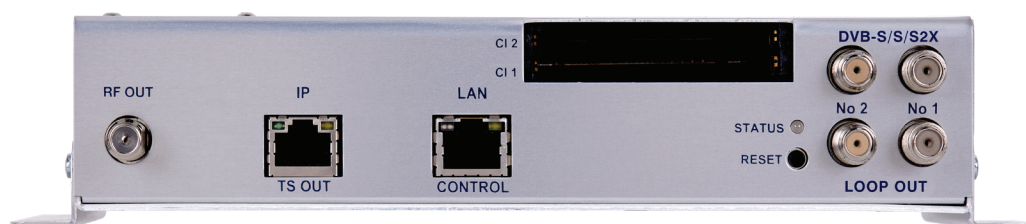
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

EAN-13

Code	5213009760218
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General

Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



CL series

MLC-301

2 x DVB-S/S2/S2X + 2 x FlexCAM σε 4 x DVB-T/C ή IP

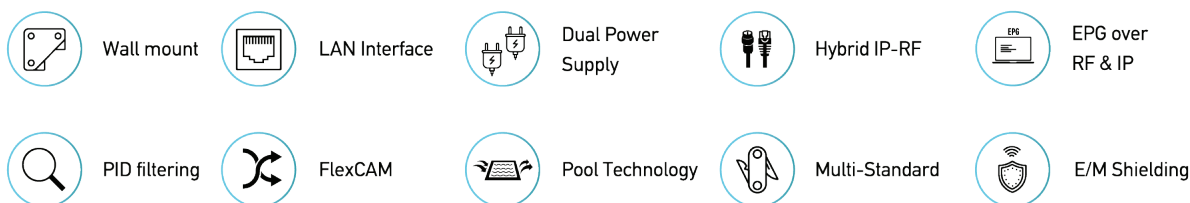
The MLC-301 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-301 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module). Moreover, it supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign it to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLC-301 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLC-301 the ideal solution in cases we want to distribute FTA (Free-To-Air) or scrambled TV programs coming from satellite (DVB-S/S2/S2X) sources to a CATV installation using the DVB-T/C or IP technology.

Features

- 2 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream support
- 2x CI interfaces using FlexCAM technology
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- PID Filtering
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5year warranty



Input Specifications

Input	
Type	2 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Connector	75Ω - F, female

LNB	
Voltage	OFF / 13V / 18V
Current	< 400mA
22 KHz signal	On / Off
-Voltage	0.65V ±0.35V
-Frequency	22 KHz ±4Hz
-DiSEqC	1.0 (Port A, B, C, D)

DVB-S	
Standard	EN 300-421 V1.1.2
Symbol Rate	1 - 55 MBaud
Roll off factor	0.2, 0.25, 0.35
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)
Spectral Inversion	Reverse, Non-reverse (automatic)

DVB-S2	
Standard	EN 307-421 V1.2.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)
Roll off factor	0.2, 0.25, 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)
Spectral inversion	Reverse, Non-reverse (automatic)

DVB-S2X	
Standard	EN302 307-1 V1.4.1
Constellation	QPSK, 8PSK (automatic)
Symbol rate	1 - 45 MBaud (QPSK) 1 - 30 MBaud (8PSK)
Roll off factor	From 0.05 to 0.35 (automatic)
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

Output Specifications

DVB-T	
Standard	EN 300-744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

ITU-T J.83

Standard	Annex A(DVB-C)
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950 MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, custom, automatic
PCR	re-stamping
LCN support	Yes
Bypass Mode	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 64 programs)
Max. Bitrate	480Mbps max. (in IP only mode)

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

EAN-13

Code	5213009760218
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General

Power Supply	2 x +12VDC
Power supply consumption	1.8A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-100

2 x HDMI to 2 x DVB-T/C

The MLH-100 is a very powerful, all-in-one mini headend device, able to receive up to two (2) HD signals and convert them either in two (2) x DVB-T/C RF output.

It supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign them to any of the two (2) RF outputs providing great flexibility.

The embedded web server of the MLH-100 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-100 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray to a CATV installation using the DVB-T/C.

Features

- 2 x HD inputs
- HDCP v1.4 support
- 2 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Wall mount



LAN Interface



Dual Power Supply



Hybrid IP-RF



EPG over RF & IP



PID filtering



FlexCAM



Pool Technology



Multi-Standard



E/M Shielding



Input Specifications

HD Input

Type	2 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

DVB-T

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-C

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol Rate	1-7.2 Ms/s

RF Output

Type	2 x RF out in adjacent channels
Output Frequencies	110...950MHz (1 Hz step)
Output Level	90dBµV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13

Code	5213009760065
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-101

4 x HDMI to 4 x DVB-T/C

The MLH-101 is a very powerful, all-in-one mini headend device, able to receive up to four (4) HD signals and convert them either in four (4) x DVB-T/C RF output channels.

It supports "pool" technology, meaning that the user is able to select any program from any of the four (4) inputs and assign them to any of the four (4) RF outputs providing great flexibility.

The embedded web server of the MLH-101 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-101 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray to a CATV installation using the DVB-T/C.

Features

- 4 x HD inputs
- HDCP v1.4 support
- 4 x RF output DVB-T/C (software selectable)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Wall mount



LAN Interface



Dual Power Supply



Hybrid IP-RF



EPG over RF & IP



PID filtering



FlexCAM



Pool Technology



Multi-Standard



E/M Shielding



Input Specifications

HD Input

Type	4 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

DVB-T

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-C

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol Rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

Programming Interface

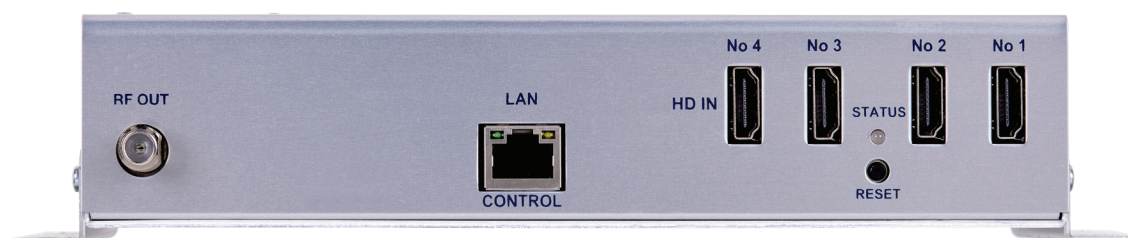
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13

Code	5213009760072
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-200

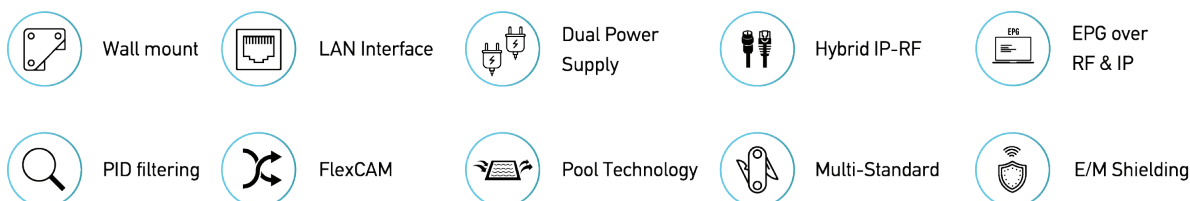
2 x HDMI to IP

The MLH-200 is a very powerful, all-in-one mini headend device, able to receive up to two (2) HD signals and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. It supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign them to any of the two (2) IP outputs providing great flexibility. The embedded web server of the MLH-200 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-200 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray using IPTV technology.

Features

- 2 x HD inputs
- HDCP v1.4 support
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Input Specifications

HD Input

Type	2 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit (480 Mbps in IP only mode)
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 4 HD programs)
Max. Bitrate	480Mbps max.

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13

Code	5213009760126
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-201

4 x HDMI to IP

The MLH-201 is a very powerful, all-in-one mini headend device, able to receive up to four (4) HD signals and convert them either in IPTV streaming using UDP/RTP protocols multicast/unicast.

It supports "pool" technology, meaning that the user is able to select any program from any of the four (4) inputs and assign them to any of the four (4) IP outputs providing great flexibility.

The embedded web server of the MLH-201 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-201 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray using IPTV technology.

Features

- 4 x HD inputs
- HDCP v1.4 support
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- Dual power supplies offering redundancy mode
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Input Specifications

HD Input

Type	4 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit (480 Mbps in IP only mode)
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS)
Max. Bitrate	SPTS (up to 4 HD programs) 480Mbps max.

Programming Interface

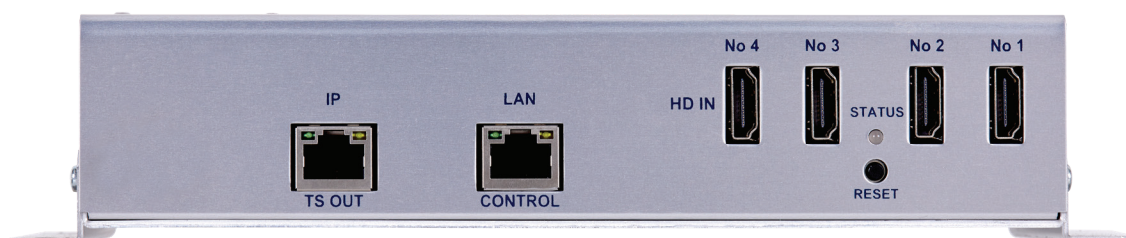
Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

EAN-13

Code	5213009760133
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-300

2 x HDMI to 2 x DVB-T/C + IP

The MLH-300 is a very powerful, all-in-one mini headend device, able to receive up to two (2) HD signals and convert them either in two (2) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast.

It supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign them to any of the two (2) RF or IP outputs providing great flexibility.

The embedded web server of the MLH-300 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-300 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray to a CATV installation using the DVB-T/C or IPTV technology.

Features

- 2 x HD inputs
- HDCP v1.4 support
- 2 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Input Specifications

HD Input

Type	2 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

DVB-T

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-C

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol Rate	1-7.2 Ms/s

RF Output

Type	2 x RF out in adjacent channels
Output Frequencies	110...950MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit (480 Mbps in IP only mode)
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS)
	SPTS (up to 4 HD programs)
Max. Bitrate	480Mbps max.

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

EAN-13

Coder	5213009760188
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg



HD series

MLH-301

4 x HDMI to 4 x DVB-T/C + IP

The MLH-301 is a very powerful, all-in-one mini headend device, able to receive up to four (4) HD signals and convert them either in four (4) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast.

It supports "pool" technology, meaning that the user is able to select any program from any of the four (4) inputs and assign them to any of the four (4) RF or IP outputs providing great flexibility.

The embedded web server of the MLH-301 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

Its small size and its powerful features render the MLH-301 the ideal solution in case we want to distribute HD content eg. coming from STBs or blue ray to a CATV installation using the DVB-T/C or IPTV technology.

Features

- 4 x HD inputs
- HDCP v1.4 support
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 42dB
- Dual power supplies offering redundancy mode
- Custom NIT/SDT
- Local or remote control via webserver
- Very friendly user interface
- Wall or rack mount options
- Ultra-compact size
- 5-year warranty



Input Specifications

HD Input

Type	4 x HD inputs
Video coding	MPEG-4 AVC / H.264
Profile	High profile 4.0
Input resolution	Up to 1920 x 1080 - 50/60 p & i
Output resolution	Up to 1920 x 1080 - 30p
HDCP support	Yes, v1.4

Audio

Audio	HD
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320 Kbps
Format	MPEG2, AAC, AC3

H.264 encoder

Standard	MPEG-4 AVC / H.264
Bit Rate	1 – 19 Mbps adjustable
Configurable Parameters	Service Name, Service ID
LCN processing	Yes

Output Specifications

DVB-T

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8

DVB-C

Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
Symbol Rate	1-7.2 Ms/s

RF Output

Type	4 x RF out in adjacent channels
Output Frequencies	110...950MHz (1 Hz step)
Output Level	90dBμV
Connector	75Ω - F, female
Output Attenuator	0...-20dB
MER	>42dB
Output loop-through loss	<1dB

Transport Stream Processing

Services	User selection by service names
Automatic Regeneration	PAT, CAT, SDT, PMTs, EITs tables
NIT/SDT	Pass-through, Custom, Automatic
PCR	re-stamping
LCN support	Yes

IP Streaming

IP TS Out	Yes
Protocol	UDP / RTP (Multicast/Unicast)
Speed	1Gbit (480 Mbps in IP only mode)
IGMP support	Yes, v2, v3
Type	MPTS (up to 4 TS) SPTS (up to 4 HD programs)
Max. Bitrate	480Mbps max.

Programming Interface

Ethernet webserver	Yes, embedded webserver
Speed	10/100 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

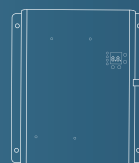
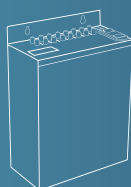
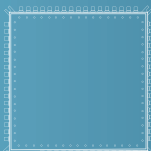
EAN-13

Coder	5213009760195
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General

Power Supply	2 x +12VDC
Power supply consumption	2A max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 115 x 48 mm
Weight	0.45 Kg





> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



TERRESTRIAL

Modulators · Amplifiers · IR RX/TX · Attenuators

MODULATORS

The HDMOD series of HDMI DVB-T modulators provides the ability to distribute any HDMI source, i.e. coming from DVD or Blu-ray player over RF DVB-T.



HDMOD-4

1 x HDMI to DVB-T (COFDM)

The HDMOD-4 is a high-quality DVB-T "Home" modulator. It receives one HDMI signal as input and converts it into one RF DVB-T channel output. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-4 an ideal solution for distributing SD/HD digital signals received from any device with an HDMI output (e.g. a DVD player, STB or camera in a CATV network using the DVB-T technology).

The user has the ability to control the device remotely using a Bluetooth interface by downloading and using the appropriate application from Google play or IOS App Store for free.

Finally, the HDMOD-4's small size and metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features:

- High quality and performance
- Very clean RF spectrum
- HDMI input
- MER value ~ 35dB
- RF output frequencies 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- Bluetooth interface
- Very small size
- External power supply



Technical Specifications

Input Specifications

Type	1 x HDMI in
HDMI loop-through	No
Connector	1 x HDMI Type A
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	470...862 MHz
Output level	90dbμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F - female

Programming interface

via Bluetooth	
Requires version 4.0 and above	
ETSI EN 300 328 and EN 300 440	
Class 2 (Europe),	
FCC CFR47 Part 15 (US) and ARIB	
STD-T66 (Japan)	

Platform support

Android version 5.1 and above	
iOS version 9.3 or above	
iPhone 4S or newer	
iPad 3rd gen or newer	

EAN-13

Code	5213009760010
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General

Power supply	+12VDC
Power supply consumption	280 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	131.0 x 83.5 x 26.0 mm
Weight	0.20 Kg

HDMOD-5L

1 x HD (in/out) to DVB-T (COFDM)

The HDMOD-5L is a high-quality DVB-T "Home" modulator with HDMI loop-through circuit. It receives one HDMI as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-5L an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology.

The user has the ability to control the device remotely using a Bluetooth interface by downloading and using the appropriate application from Google play or IOS App Store for free.

Finally, the HDMOD-5L's small size and metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features

- High quality and performance
- Very clean RF spectrum
- HDMI input
- HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- Bluetooth interface
- Very small size
- External power supply



Input Specifications

Type	1 x HDMI in & 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dbμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

Programming interface

via Bluetooth	
Requires version 4.0 and above	
ETSI EN 300 328 and EN 300 440 Class 2 (Europe),	
FCC CFR47 Part 15 (US) and ARIB STD-T66 (Japan)	

App information

Android version 5.1 and above	
iOS version 11 or above	

EAN-13

Code	5213009760904
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General

Power supply	+12VDC
Power supply consumption	290 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	160.0 x 89.3 x 28.4 mm
Weight	0.25 Kg

HDMOD-5S

1 x HD (in/out) to DVB-T (COFDM) + IR TX

The HDMOD-5S is a high-quality DVB-T “Home” modulator with HDMI loop-through circuit. It receives one HDMI signal as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-5S an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology.

The user has the ability to control the device remotely using a Bluetooth interface by downloading and using the appropriate application from Google play or IOS App Store for free.

Finally, the HDMOD-5S's small size and metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features

- High quality and performance
- Very clean RF spectrum
- HDMI input
- RF & HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- IR support
- Bluetooth interface
- Very small size
- External power supply



Input Specifications

Type	1 x HDMI in & 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dBμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

IR Transmitter

Output frequency	10.7MHz
Working frequencies	5...862MHz
Modulation Type	ASK
Insertion Loss	<1dB

IR Emitter cable

IR Frequency range	30 to 60KHz
IR Wavelength	940nm
IR Distance	15-20m
Length	1m
Connector	3.5mm Stereo Mini-jack

Programming interface

via Bluetooth	Requires version 4.0 and above
	ETSI EN 300 328 and EN 300 440 Class 2 (Europe),
	FCC CFR47 Part 15 (US) and ARIB STD-T66 (Japan)

Platform support

Android version 5.1 and above	
iOS version: 9.3 or above	
iPhone: 4S or newer	
iPad: 3rd gen or newer	

EAN-13

Code	5213009760911
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General

Power supply	+12VDC
Power supply consumption	290 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	160.0 x 89.3 x 28.4 mm
Weight	0.25 Kg

HDMOD-5F

1 x HD (in/out) + A/V in to DVB-T (COFDM) + IR TX



The HDMOD-5L is a high-quality DVB-T "Home" modulator with HDMI loop-through circuit. It receives one HDMI as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-5L an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology.

The user has the ability to control the device remotely using a Bluetooth interface by downloading and using the appropriate application from Google play or IOS App Store for free.

Finally, the HDMOD-5L's small size and metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Input Specifications

Type	1 x HDMI in & 1 x CVBS & 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A 1 x RCA – Female (White, Red, Yellow)
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level:	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

Features

- High quality and performance
- Very clean RF spectrum
- CVBS & HDMI input
- RF & HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- IR support
- Bluetooth interface
- Very small size
- External power supply

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dBμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

IR Transmitter

Output frequency	10.7MHz
Working frequencies	5...862MHz
Modulation Type	ASK
Insertion Loss	<1dB

IR Emitter cable

IR Frequency range	30 to 60KHz
IR Wavelength	940nm
IR Distance	15-20m
Length:	1m
Connector:	3.5mm Stereo Mini-jack

Programming interface

via Bluetooth	Requires version 4.0 and above
ETSI EN 300 328 and EN 300 440 Class 2 (Europe), FCC CFR47 Part 15 (US) and ARIB STD-T66 (Japan)	

Platform support

Android version 5.1 and above	
iOS version: 9.3 or above	
iPhone: 4S or newer	
iPad: 3rd gen or newer	

EAN-13

Code	5213009760928
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General

Power supply	+12VDC
Power supply consumption	290 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	160.0 x 89.3 x 28.4 mm
Weight	0.25 Kg

HDMOD-6L

1 x HDMI (in/out) to DVB-T

The HDMOD-6L is a high-quality DVB-T "Home" modulator with HDMI loop-through circuit. It receives one HDMI as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-6L an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology.

The user has the ability to control the device by either using the onboard SSD (Seven Segment Display) interface and keypad for quick installation or by using the USB interface with the appropriate software accompanying the HDMOD-6L for advance programming.

Finally, the HDMOD-6L's metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features

- High quality and performance
- Very clean RF spectrum
- HDMI input
- HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- Very small size
- External power supply
- USB interface for advanced setup



Input Specifications

Type	1 x HDMI in 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dBμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

Programming interface

Via Keypad and SSD display
Via USB interface

EAN-13

Code	5213009760935
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General

Power supply	+12VDC
Power supply consumption	450 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198.0 x 100 x 26.4 mm
Weight	0.26 Kg



HDMOD-6S

1 x HDMI (in/out) to DVB-T + IR TX

The HDMOD-6S is a high-quality DVB-T "Home" modulator with HDMI loop-through circuit. It receives one HDMI as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-6S an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology. Moreover, the HDMOD-6S has an embedded IR transmitter circuit to transfer the IR signal of a remote control over the coaxial network within a CATV installation. The user has the ability to control the device by either using the onboard SSD (Seven Segment Display) interface and keypad for quick installation or by using the USB interface with the appropriate software accompanying the HDMOD-6S for advance programming. Finally, the HDMOD-6S's metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features

- High quality and performance
- Very clean RF spectrum
- HDMI input
- RF loop-through circuit
- HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps
- HDCP support
- Embedded IR transmitter
- Very small size
- External power supply
- USB interface for advanced setup

Input Specifications

Type	1 x HDMI in & 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dBμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

RF input of IR Transmitter

Working frequency	5...30MHz
Modulation type	ASK
Sensitivity	>45dBμV
Loop-through frequency	5...862MHz
Loop-through attenuation	<1dB
RF Connector	F-female

IR Transmitter

Working frequency	38 KHz
Wavelength	940nm
Distance	1.5m max.
IR Connector	3.5mm stereo mini-jack
IR cable length	1m

Programming interface

Via Keypad and SSD display	
Via USB interface	

EAN-13

Code	5213009760942
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General

Power supply	+12VDC
Power supply consumption	450 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198.0 x 100 x 26.4 mm
Weight	0.26 Kg

HDMOD-6F

1 x HDMI (in/out)+A/V IN to DVB-T + IR TX

The HDMOD-6F is a high-quality DVB-T "Home" modulator with HDMI loop-through circuit. It receives one HDMI or one CVBS signal as input and converts it into one RF DVB-T channel output as well as in HDMI out. The excellent picture (Full HD 1920*1080-30p) and modulation quality (MER~35dB) renders the HDMOD-6F an ideal solution for distributing SD/HD digital signals received from any device (e.g. a DVD player, STB or camera) in a CATV network using the DVB-T technology. Moreover, the HDMOD-6F has an embedded IR transmitter circuit to transfer the IR signal of a remote control over the coaxial network within a CATV installation.

The user has the ability to control the device by either using the onboard SSD (Seven Segment Display) interface and keypad for quick installation or by using the USB interface with the appropriate software accompanying the HDMOD-6F for advance programming.

Finally, the HDMOD-6F's metal case provides excellent electromagnetic shielding as well as great temperature dissipation and rigidity.

Features

- High quality and performance
- Very clean RF spectrum
- CVBS & HDMI input
- RF loop-through circuit
- HDMI loop-through circuit
- MER value ~ 35dB
- RF output frequencies 174...230 MHz & 470...862 MHz
- H.264 HD encoder bitrate 1-19Mbps HDCP support
- Embedded IR transmitter
- Very small size
- External power supply
- USB interface for advanced setup



Input Specifications

Type	1 x HDMI in & 1 x CVBS + Audio L/R & 1 x HDMI out
HDMI loop-through	Yes
Connector	1 x HDMI Type A 1 x RCA – Female (White, Red, Yellow)
Video coding	MPEG-4 AVC/H.264
Profile	High profile 4.0
Resolution	1920x1080-30p for HDMI
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Level	0.5Vpp to 1.0Vpp adjustable

H.264 Encoder

Standard	MPEG-4 AVC/H.264
Bit Rate	1 – 19 Mb/s adjustable
Configurable parameters	Service Name, Service ID, Video PID, Audio PID, PMT PID

Transport Stream Processing

Automatic regeneration	NIT, PAT, CAT, SDT, PMTs, EITs tables
Configurable parameters	TS ID, Original Network ID, Network ID, Provider Name
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth	5, 6, 7, 8 MHz
Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard interval	1/4, 1/8, 1/16, 1/32
Code rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T (COFDM)
Output frequencies	174...230 MHz & 470...862 MHz
Output level	85dBμV max.
Connector	75Ω - F, female
Output attenuator	0, -10, -20dBm
MER	35dB (Typical)
Shoulder attenuation	>45dBc
Connectors	1 x F – female

RF input of IR Transmitter

Working frequency	5...30MHz
Modulation type	ASK
Sensitivity	>45dBμV
Loop-through frequency	5...862MHz
Loop-through attenuation	<1dB
RF Connector	F-female

IR Transmitter

Working frequency	38 KHz
Wavelength	940nm
Distance	1.5m max.
IR Connector	3.5mm stereo mini-jack
IR cable length	1m

Programming interface

Via Keypad and SSD display
Via USB interface

EAN-13

Code	5213009760959
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General

Power supply	+12VDC
Power supply consumption	450 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198.0 x 100 x 26.4 mm
Weight	0.26 Kg

AMPLIFIERS

Full band amplifiers offering great performance and ultimate electromagnetic shielding under the most difficult circumstances.



DA101

The DA101 is a full band amplifier with 26dB gain and 108dBuV RF output level, with a 20dB equalizer. It offers an exceptional RF performance and linearity, while it's metal case provides a robust desing and excellent electromagnetic shielding.



Full band amplifier 26dB gain / 108dbuV output with equalizer

Electrical	
Frequency range	50...860MHz
Output level IMD3 @-60dB (EN60728-3)	108dBuV
Output level IMD2 @-60dB (EN60728-3)	100dBuV
Return Loss	>13dB
Linearity	±1dB
Impedance	75Ω
Gain	
Gain	26dB ±1
Noise figure	6dB
Loss	
Attenuation	0...20dB
Equalization	0...15dB
Connectors	
Input/Output	1/1
Test point output	-
Connector	F-female
Operational	
LED indicator	Blue
IP Housing protection class	IP 20
Insulation class	II
EAN-13	
Code	5213009761710
General	
Power supply	+12VDC
Power supply consumption	170mA max.
Operating temperature	0 °C to 40 °C"
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	165 x 110 x 37 mm
Weight	0.50 Kg

DA102

The DA102 is a full band amplifier with 36dB gain and 118dBuV RF output level, with a 20dB equalizer. It offers an exceptional RF performance and linearity, while it's metal case provides a robust desing and excellent electromagnetic shielding.



Full band amplifier 36dB gain / 118dbuV output with equalizer

Electrical

Frequency range	100-1200MHz
Output level IMD3 @-60dB [EN60728-3]	118dBuV
Output level IMD2 @-60dB [EN60728-3]	114dBuV
Return Loss	>13dB
Linearity	±1dB
Impedance	75Ω

Gain

Gain	36dB ±1
Noise figure	6dB

Loss

Attenuation	0...20dB
Equalization	0...15dB

Connectors

Input/Output	1/1
Test point output	-
Connector	F-female

Operational

LED indicator	Blue
IP Housing protection class	IP 20
Insulation class	II

EAN-13

Code	5213009761727
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General

Power supply	+12VDC
Power supply consumption	290mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	165 x 110 x 37 mm
Weight	0.50 Kg

DA103

The DA103 is a full band amplifier with 36dB gain and 120dBuV RF output level, with a 20dB equalizer. It offers an exceptional RF performance and linearity, while it's metal case provides a robust desing and excellent electromagnetic shielding.



Full band amplifier 36dB gain / 120dbuV output with equalizer

Electrical	
Frequency range	100-1200MHz
Output level IMD3 @-60dB [EN60728-3]	120dBuV
Output level IMD2 @-60dB [EN60728-3]	115dBuV
Return Loss	>13dB
Linearity	±1dB
Impedance	75Ω
Gain	
Gain	36dB ±1
Noise figure	6dB
Loss	
Attenuation	0...20dB
Equalization	0...15dB
Connectors	
Input/Output	1/1
Test point output	1 @-20dB
Connector	F-female
Operational	
LED indicator	Blue
IP Housing protection class	IP 20
Insulation class	II
EAN-13	
Code	5213009761734
General	
Power supply	+12VDC
Power supply consumption	380mA max.
Operating temperature	0 °C to 40 °C"
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	175 x 110 x 37 mm
Weight	0.57 Kg

IR TX/RX

Distribute the IR signal of any remote control from any Set-Top-Box in a coaxial installation, easy and without any interference.



LRI-107-038

IR receiver

Features

- High quality and performance
- Very clean RF spectrum without harmonics
- High RF output (113 dBμV)
- High IR signal reception sensitivity
- Support for F and IEC connectors
- Micro USB power connector
- Very small size
- External power supply

RF input

Working frequency	10.7MHz
Modulation type	ASK
Output level	113dBμV
Loop-through frequency	5...862MHz
Loop-through attenuation	<1dB
RF connector	F-female

IR output

IR working frequency	38 KHz
IR distance	Up to 10m.
IR connector	3.5mm stereo mini-jack

EAN-13

Code	5213009761390
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General

Power supply	+5VDC
Connector	USB female micro
Power consumption	0.15A max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	206 x 179 x 30mm
Weight	60gr



LTI-038

IR transmitter

Features

- High quality and performance
- Very clean RF spectrum without harmonics
- High RF output (113 dBμV)
- High IR signal reception sensitivity
- Support for F and IEC connectors
- Micro USB power connector
- Very small size
- External power supply

RF input

Working frequency	10.7MHz
Modulation type	ASK
Output level	45dBμV
Loop-through frequency	5...862MHz
Loop-through attenuation	<1dB
RF connector	F-female

IR output

IR working frequency	38 KHz
IR distance	1.5m max.
IR connector	3.5mm stereo mini-jack

EAN-13

Code	5213009761383
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General

Power supply	+5VDC
Connector	USB female micro
Power consumption	0.15A max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	206 x 179 x 30mm
Weight	60gr



ATTENUATORS

RF attenuators of -5dB, -10dB and -20dB for any kind of application.



LAT-005



5dB attenuator F male to F female @ 75Ω

Technical Specifications

Electrical

Attenuation	5dB
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Insertion loss	± 1dB
Return loss	≥ 18dB

Connectors

No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No

EAN-13

Code	5213009761345
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General

Operating temperature	0 °C to 40°C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	42 x 13mm
Weight	33.5 gr

LAT-010



10dB attenuator F male to F female @ 75Ω

Technical Specifications

Electrical

Attenuation	10dB
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Insertion loss	± 1dB
Return loss	≥ 18dB

Connectors

No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No

EAN-13

Code	5213009761352
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General

Operating temperature	0 °C to 40°C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	42 x 13mm
Weight	33.5 gr

LAT-020



20dB attenuator F male to F female @ 75Ω

Technical Specifications

Electrical

Attenuation	20dB
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Insertion loss	± 1dB
Return loss	≥ 18dB

Connectors

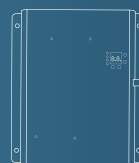
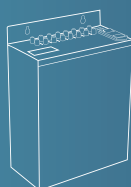
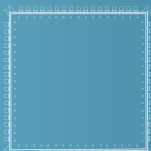
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No

EAN-13

Code	5213009761369
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General

Operating temperature	0 °C to 40°C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	42 x 13mm
Weight	33.5 gr



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:

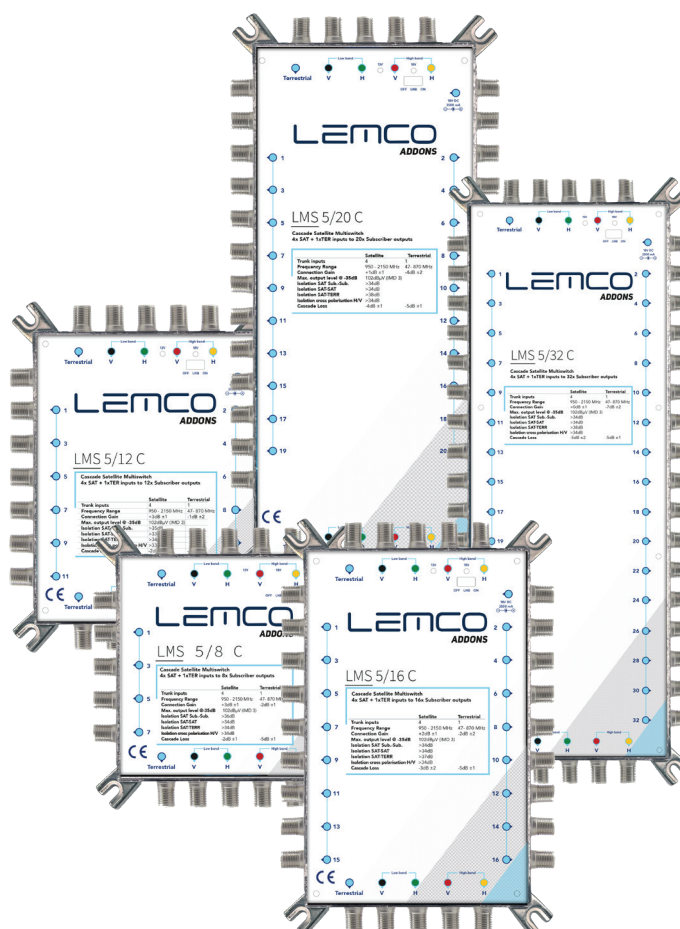


Satellite

Multiswitches · Amplifiers · LNBs · CAM · Accessories

MULTISWITCHES

A complete satellite multi-switches series (-5,-9,-13 and -17 inputs) made out of zamac, able to distribute Satellite/Terrestrial in any kind of installation.



5-input-single/cascade

Features:

- Supporting Single, Quad, Quattro LNBs
- Excellent performance
- Compact size
- ZAMAK case
- External power supply

LMS 5/8 S



5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TE	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	8
Gain TER	-2dB ±1
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>36dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760249
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 135 x 35 mm
Weight	0.469 Kg

LMS 5/8 C



5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	8
Gain TER	-2dB ±1
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>36dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1
EAN-13	
Code	5213009760300
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 135 x 35 mm
Weight	0.469 Kg

LMS 5/12 S

5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	12
Gain	-1dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>35dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760256
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 135 x 35 mm
Weight	0.564 Kg



LMS 5/12 C

5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	12
Gain TER	-1dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>35dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1
EAN-13	
Code	5213009760317
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 135 x 35 mm
Weight	0.564 Kg



LMS 5/16 S

5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	50 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	16
Gain TER	+2dB ±1
Gain SAT	+1dB ±2
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760263
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 135 x 35 mm
Weight	0.658 Kg



LMS 5/16 C

5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	16
Gain TER	-2dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±2
EAN-13	
Code	5213009760324
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 135 x 35 mm
Weight	0.658 Kg



LMS 5/20 S

5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	20
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760270
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 135 x 35 mm
Weight	0.859 Kg



LMS 5/20 C

5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	20
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1
EAN-13	
Code	5213009760331
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 135 x 35 mm
Weight	0.859 Kg

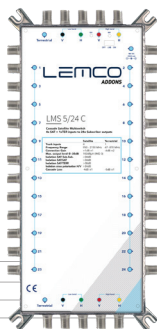


LMS 5/24 S

5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	24
Gain TER	+2dB ±1
Gain SAT	-2dB ±2
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760287
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 135 x 35 mm
Weight	0.859 Kg

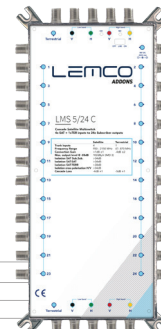


LMS 5/24 C

5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	24
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1
EAN-13	
Code	5213009760348
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 135 x 35 mm
Weight	0.859 Kg

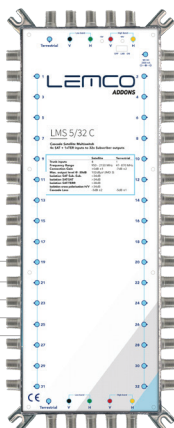


LMS 5/32 S

5-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	+1dB ±1
Gain SAT	-5dB ±2
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760294
General	
Power supply	+18VDC
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 135 x 35 mm
Weight	0.985 Kg



LMS 5/32 C

5-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-7dB ±2
Gain SAT	+0dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-5dB ±2
EAN-13	
Code	5213009760355
General	
Power supply	+18VDC (Not included)
Power supply consumption	350mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 135 x 35 mm
Weight	0.985 Kg



9-input-single/cascade

Features:

- Supporting Single, Quad, Quattro LNBS
- Excellent performance
- Compact size
- ZAMAK case
- External power supply

LMS 9/8 S

Technical Specifications

9-INPUT SINGLE



Input

Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output

No of Subscribers	8
Gain TER	+4dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB

Cascade

No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13

Code	5213009760362
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General

Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 198 x 35 mm
Weight	0.665 Kg

LMS 9/8 C

Technical Specifications

9-INPUT CASCADE



Input

Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output

No of Subscribers	8
Gain TER	+4dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB

Cascade

No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1

EAN-13

Code	5213009760423
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General

Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 198 x 35 mm
Weight	0.665 Kg

LMS 9/12 S

9-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>35dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760379

General	
Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 198 x 35 mm
Weight	0.771 Kg



LMS 9/12 C

9-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>35dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1

EAN-13	
Code	5213009760430

General	
Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 198 x 35 mm
Weight	0.771 Kg



LMS 9/16 S

9-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>37dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760386

General	
Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 198 x 35 mm
Weight	0.884 Kg



LMS 9/16 C

9-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>37dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1

EAN-13	
Code	5213009760447

General	
Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 198 x 35 mm
Weight	0.884 Kg



LMS 9/20 S

9-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760393

General	
Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 198 x 35 mm
Weight	1.150 Kg



LMS 9/20 C

9-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1

EAN-13	
Code	5213009760454

General	
Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 198 x 35 mm
Weight	1.150 Kg



LMS 9/24 S

9-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

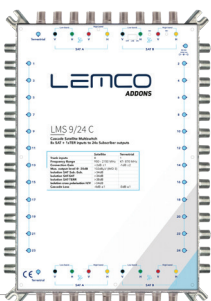
Output	
No of Subscribers	24
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760409

General	
Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 198 x 35 mm
Weight	1.150 Kg



LMS 9/24 C

9-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	24
Gain TER	-1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>38dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1

EAN-13	
Code	5213009760461

General	
Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 198 x 35 mm
Weight	1.150 Kg



LMS 9/32 S

9-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-3dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760416
General	
Power supply	+18VDC
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 198 x 35 mm
Weight	1.305 Kg



LMS 9/32 C

9-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-3dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	8+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-5dB ±2
EAN-13	
Code	5213009760478
General	
Power supply	+18VDC (Not included)
Power supply consumption	700mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 198 x 35 mm
Weight	1.305 Kg



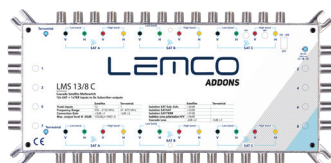
13-input-single/cascade

Features:

- Supporting Single, Quad, Quattro LNBS
- Excellent performance
- Compact size
- ZAMAK case
- External power supply

LMS 13/8 S

13-INPUT SINGLE



Technical Specifications

Input

Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output

No of Subscribers	8
Gain TER	+3dB ±1
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade

No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13

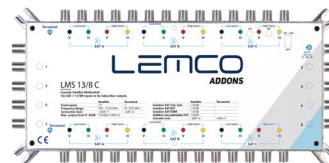
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General

Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 135 x 45 mm
Weight	0.775 Kg

LMS 13/8 C

13-INPUT CASCADE



Technical Specifications

Input

Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output

No of Subscribers	8
Gain TER	-1dB ±1
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade

No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±2

EAN-13

Code	5213009761178
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General

Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 135 x 45 mm
Weight	0.775 Kg

LMS 13/12 S

13-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	+2dB ±1
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009761123

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 160 x 45 mm
Weight	0.935 Kg



LMS 13/12 C

13-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	-2dB ±1
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±2

EAN-13	
Code	5213009761185

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 160 x 45 mm
Weight	0.935 Kg



LMS 13/16 S

13-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	+1dB ±1
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009761130

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 190 x 45 mm
Weight	1.107 Kg



LMS 13/16 C

13-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	-3dB ±1
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±2

EAN-13	
Code	5213009761192

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 190 x 45 mm
Weight	1.107 Kg



LMS 13/20 S

13-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-2dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009761147

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 275 x 45 mm
Weight	1.462 Kg



LMS 13/20 C

13-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-6dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±2

EAN-13	
Code	5213009761208

General	
Power supply	+18VDC
Power supply consumption	810mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 275 x 45 mm
Weight	1.462 Kg



LMS 13/24 S

13-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	24
Gain TER	-2dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009761154

General	
Power supply	+18VDC
Power supply consumption	940mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 275 x 45 mm
Weight	1.462 Kg



LMS 13/24 C

13-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	24
Gain TER	-6dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±2

EAN-13	
Code	5213009761215

General	
Power supply	+18VDC
Power supply consumption	940mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 275 x 45 mm
Weight	1.462 Kg



LMS 13/32 S

13-INPUT SINGLE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-4dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009761161
General	
Power supply	+18VDC
Power supply consumption	940mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 320 x 45 mm
Weight	1.590 Kg

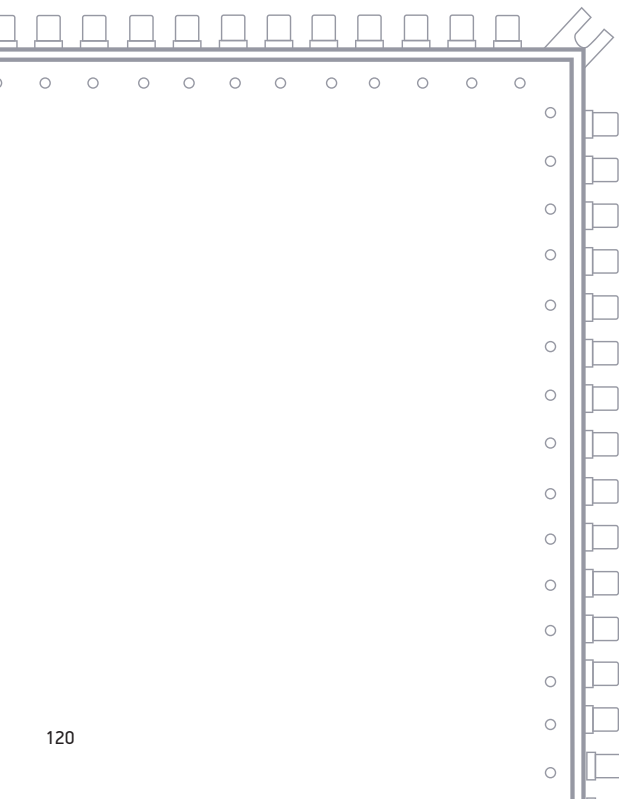


LMS 13/32 C

13-INPUT CASCADE

Technical Specifications

Input	
Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-8dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	12+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-5dB ±2
EAN-13	
Code	5213009761222
General	
Power supply	+18VDC
Power supply consumption	940mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	280 x 320 x 45 mm
Weight	1.590 Kg



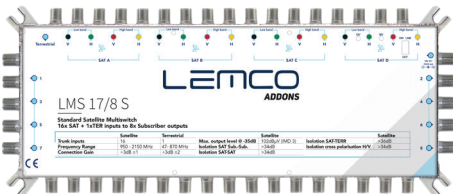
17-input-single/cascade

Features:

- Supporting Single, Quad, Quattro LNBS
- Excellent performance
- Compact size
- ZAMAK case
- External power supply

LMS 17/8 S

17-INPUT SINGLE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	8
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760485
General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 326 x 35 mm
Weight	0.984 Kg

LMS 17/8 C

17-INPUT CASCADE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	8
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB
Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±2
EAN-13	
Code	5213009760546
General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	135 x 326 x 35 mm
Weight	0.984 Kg

LMS 17/12 S

17-INPUT SINGLE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760492

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 326 x 35 mm
Weight	1.152 Kg

LMS 17/12 C

17-INPUT CASCADE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	12
Gain TER	+3dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>36dB
Isolation cross polarisation H/V	>34dB

Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±2

EAN-13	
Code	5213009760553

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	166 x 326 x 35 mm
Weight	1.152 Kg

LMS 17/16 S

17-INPUT SINGLE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	+1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760508

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 326 x 35 mm
Weight	1.307 Kg

LMS 17/16 C

17-INPUT CASCADE



Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	16
Gain TER	+1dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±1

EAN-13	
Code	5213009760560

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	198 x 326 x 35 mm
Weight	1.307 Kg

17-INPUT SINGLE

LMS 17/20 S

Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-2dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760515

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 326 x 35 mm
Weight	1.696 Kg



17-INPUT CASCADE

LMS 17/20 C

Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	20
Gain TER	-2dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±1

EAN-13	
Code	5213009760577

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 326 x 35 mm
Weight	1.696 Kg



17-INPUT SINGLE

LMS 17/24 S

Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	24
Gain TER	-2dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

EAN-13	
Code	5213009760522

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 326 x 35 mm
Weight	1.696 Kg



17-INPUT CASCADE

LMS 17/24 C

Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC

Output	
No of Subscribers	24
Gain TER	-2dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB

Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±1

EAN-13	
Code	5213009760584

General	
Power supply	+18VDC
Power supply consumption	850mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	278 x 326 x 35 mm
Weight	1.696 Kg



17-INPUT SINGLE

LMS 17/32 S

Technical Specifications

Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
EAN-13	
Code	5213009760539
General	
Power supply	+18VDC
Power supply consumption	1000mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 326 x 35 mm
Weight	1.910 Kg

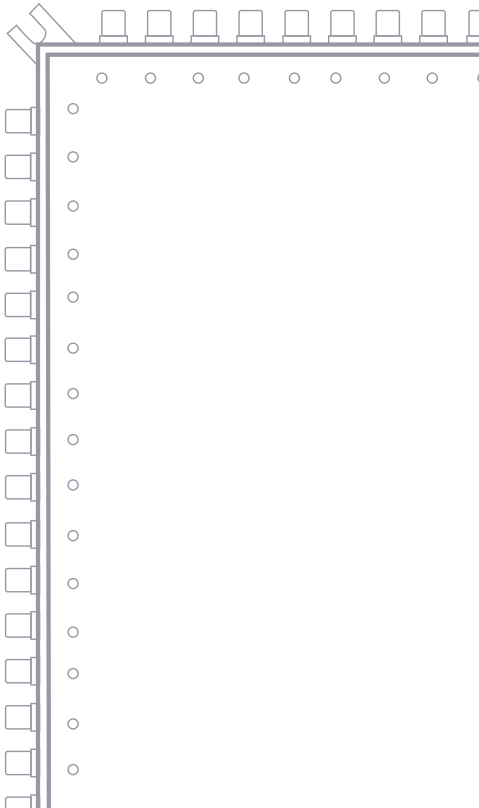


17-INPUT CASCADE

LMS 17/32 C

Technical Specifications

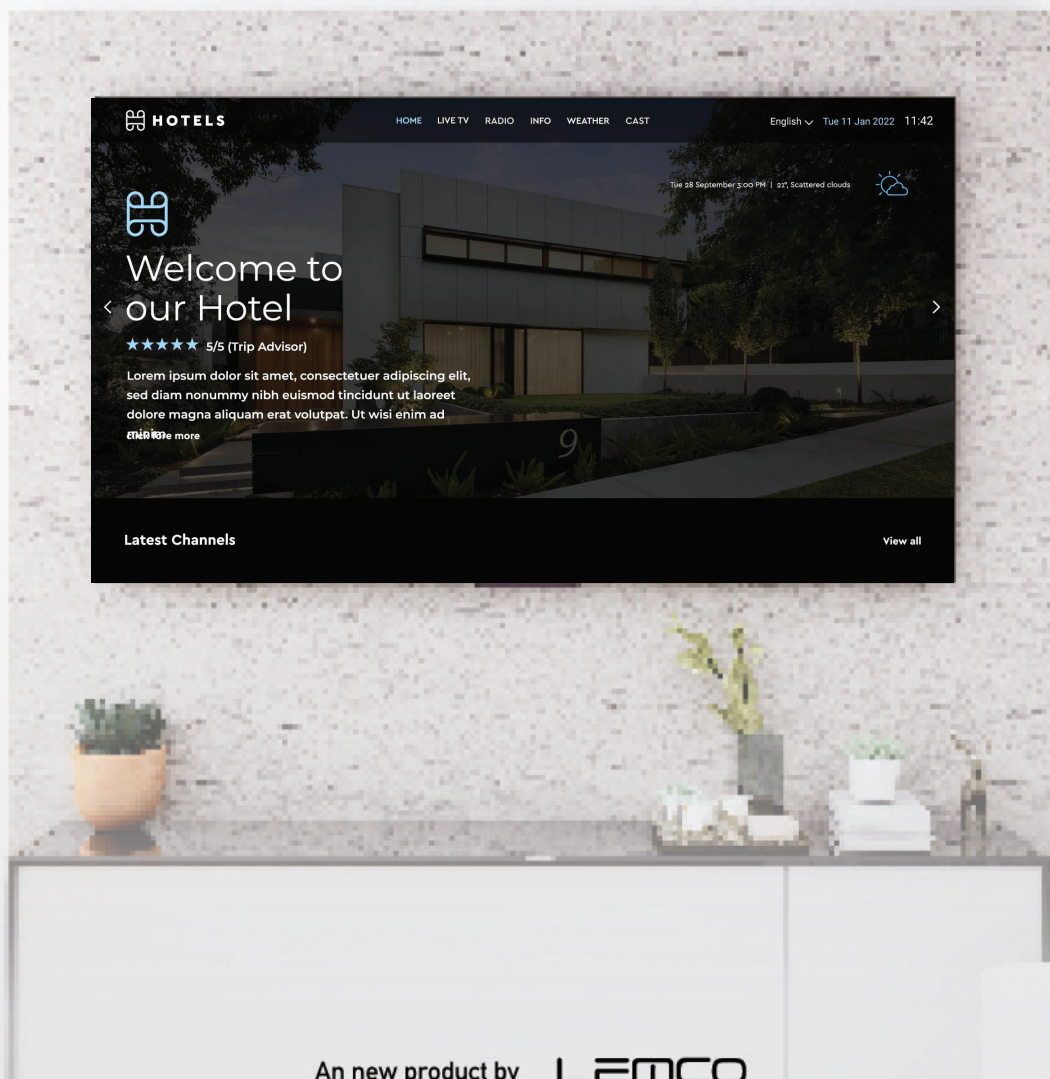
Input	
Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Connector	F- female
Impedance	75Ω
Switch commands	13/18 V, 0/22 kHz, DiSEqC 2.0, Toneburst VDC
Output	
No of Subscribers	32
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>33dB
Cascade	
No of outputs (SAT+TER)	16+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-5dB ±2
EAN-13	
Code	5213009760591
General	
Power supply	+18VDC
Power supply consumption	1000mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	326 x 326 x 35 mm
Weight	1.910 Kg





Meet the ultimate experience with the upcoming "Fleex Prime" by connecting and interacting with your customers and make their experience unique by enhancing their accommodation with a complete suite of new technological services.

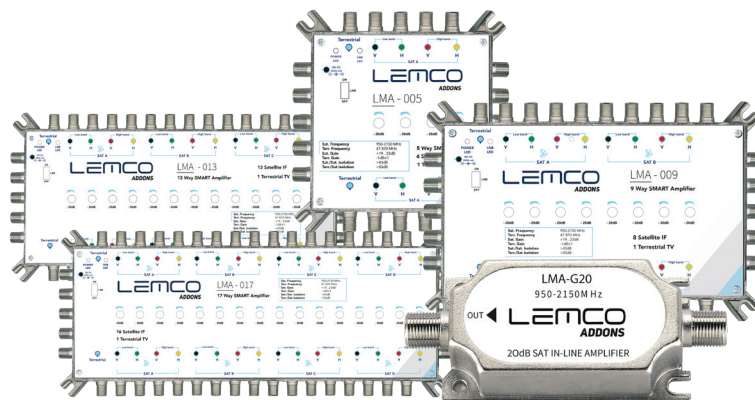
- Live TV
- Live Radio
- Video-On-Demand (VOD)
- Pay TV
- HLS streaming on mobile devices over WIFI
- Welcome" functionality
- Automatic Check IN/OUT
- PMS connectivity
- Billing
- Point of Interests (POI)
- Advertisements
- Ordering system
- Flight/Train schedule
- Weather info
- Time/Date info
- 'Alarm' functionality
- Unlimited support of TVs
- Support of LG, Samsung, Philips Hotel Smart TVs
- External STB supported
- Chromecast support
- Unlimited languages
- Very easy interface
- Parental control
- Applications
- Internet browser
- And more...



An new product by LEMCO

SATELLITE AMPLIFIERS

The LMA-xxx series of satellite multi-switch amplifiers are the ideal solution in cases we need to amplify or equalize any SAT/TER signal.

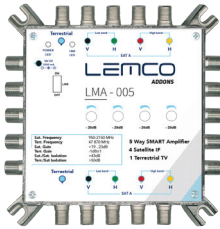


LMA-005

Technical Specifications

Input	
Trunk inputs (SAT+TER)	4+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Max. signal input (SAT)	110dBuV
Connector	F- female
Impedance	75Ω
Output	
Gain TER	-1dB ±1
Gain SAT	+19...23dB
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT-SAT	>43dB
Isolation SAT-TERR	>50dB
EAN-13	
Code	5213009760782
General	
Power supply	+18VDC
Power supply consumption	600mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	120 x 120 x 45 mm
Weight	0.430 Kg

Multiswitch amplifier compatible with all 5-inputs multiswitch series made of ZAMAK material. PSU is included.

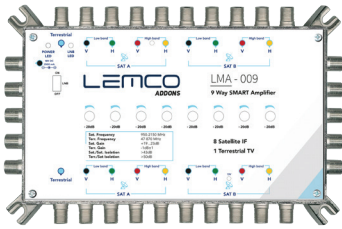


LMA-009

Technical Specifications

Input	
Trunk inputs (SAT+TER)	8+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Max. signal input (SAT)	110dBuV
Connector	F- female
Impedance	75Ω
Output	
Gain TER	-1dB ±1
Gain SAT	+19...23dB
Connector	F- female
Impedance	75Ω
Isolation	
Isolation SAT-SAT	>43dB
Isolation SAT-TERR	>50dB
EAN-13	
Code	5213009760799
General	
Power supply	+18VDC
Power supply consumption	760mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	195 x 120 x 45 mm
Weight	0.670 Kg

Multiswitch amplifier compatible with all 9-inputs multiswitch series made of ZAMAK material. PSU is included.

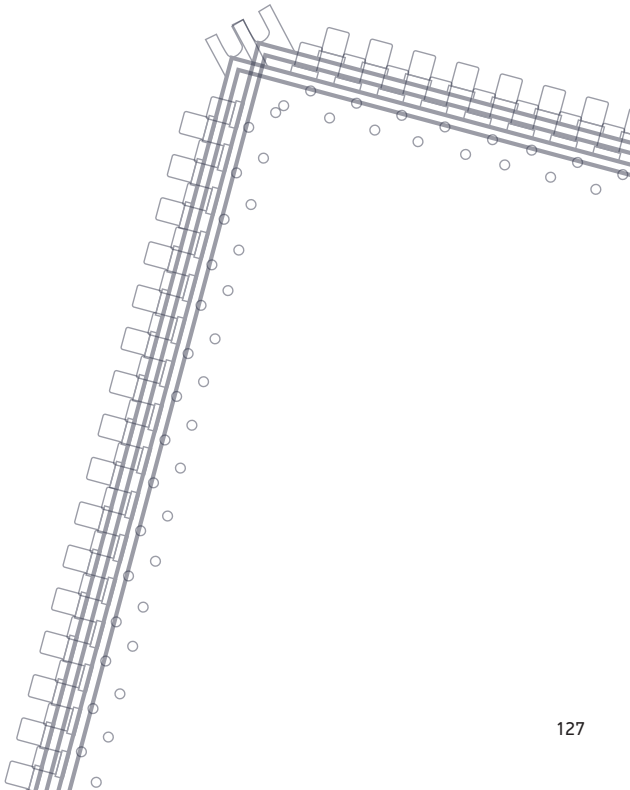


Amplifier for satellite signal in L-band (950-2150MHz) with 20dB gain.

LMA-G20

Technical Specifications

Electrical	
Input port	1
Output port	1
Frequency range	950-2400MHz
Gain	20dB
Return loss	10dB
Noise figure	4dB
Connector	F- female
Impedance	75Ω
EAN-13	
Code	5213009761246
General	
Power supply	+12...+18VDC
Power supply consumption	30mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	80 x 35 x 17 mm
Weight	50 gr



Multiswitch amplifier compatible with all 13-input multiswitch series made of ZAMAK material. PSU is included.

LMA-013

Technical Specifications

Input

Trunk inputs (SAT+TER)	12+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Max. signal input (SAT)	110dBuV
Connector	F- female
Impedance	75Ω

Output

Gain TER	-1dB ±1
Gain SAT	+19...23dB
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT-SAT	>43dB
Isolation SAT-TERR	>50dB

EAN-13

Code	5213009761239
------	---------------

General

Power supply	+18VDC
Power supply consumption	880mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	310 x 120 x 45 mm
Weight	0.840 Kg



Multiswitch amplifier compatible with all 17-input multiswitch series made of ZAMAK material. PSU is included.

LMA-017

Technical Specifications

Input

Trunk inputs (SAT+TER)	16+1
Frequency Range SAT	950 - 2150 MHz
Frequency Range TER	47 - 870 MHz
Max. signal input (SAT)	110dBuV
Connector	F- female
Impedance	75Ω

Output

Gain TER	-1dB ±1
Gain SAT	+19...23dB
Connector	F- female
Impedance	75Ω

Isolation

Isolation SAT-SAT	>43dB
Isolation SAT-TERR	>50dB

EAN-13

Code	5213009760805
------	---------------

General

Power supply	+18VDC
Power supply consumption	1200mA max.
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	410x 120 x 45 mm
Weight	1.100 Kg



Lemco by numbers

5 *years*
warranty

47
countries
all over the world

100%
EU manufactured

15.000
Headends & counting...

Produced with the most technologically advanced methods and featuring cutting-edge technical features, our high-end product line offers cost-wise, professional solutions, addressing the needs of the Greek and European markets.

LNBs

Highly sensitive and low noise LNB series, with extra UV protection, able to operate under the worst weather conditions.



LNB-101

SINGLE KU-BAND LNB WITH UV FILTER

The LNB-101 is a single KU-band LNB of excellent performance. It's UV filter on the cap ensures long time longevity even under hard enviroment conditions while it's small size offer the maximum flexibility.

Technical Specifications

Frequency	
Input range (low band)	10.70...11.70 GHz
Input range (high band)	11.70...12.75 GHz
Output range (low band)	950...1950 MHz
Output range (high band)	1100...2150 MHz
L.O. (low band)	9.75 GHz
L.O. (high band)	10.60 GHz
Stability @ +2...5oC	±1.0MHz (Max.)
Stability @ -30...+70oC	±2.0MHz (Max.)
Gain	
Conversion gain	60 dB (Typ.)
Gain flatness	±0.5dB/27MHz
Noise figure	0.3dB (Typ.)
Isolation	
Cross polarization (Min.)	20dB
Electrical	
Impedance	75Ω
L.O. Phase Noise @ 1KHz	-75dBc/Hz
L.O. Phase Noise @ 10KHz	-80dBc/Hz
L.O. Phase Noise @ 100KHz	-90dBc/Hz
Image rejection	40dB (Min.)
Output VSWR	2.0:1 (Typ.)
P1dB	0dBm (Min.)
Band switching (Low):	0Hz
Band switching (High):	22KHz ± 4KHz
POL switching voltage (Low)	10.5...14.0V
POL switching voltage (High)	16.0...20.0V



Connectors	
No of outputs	1
Connector	F-female
EAN-13	
Code	5213009761031
General	
Consumption	100mA (Typ.)
Housing material	PVC with UV filter
Operating temperature	0 °C to 40 °C
Storage temperature	-30 °C to +70 °C
Humidity	Up to 90%
Dimensions	52.5 x 38.5 x 28mm
Weight	70gr



LNB-104

QUATTRO KU-BAND LNB WITH UV FILTER

The LNB-104 is a Quattro KU-band LNB of excellent performance. It's UV filter on the cap ensures long time longevity even under hard environment conditions while it's small size offer the maximum flexibility.

Technical Specifications

Frequency	
Input range (low band)	10.70...11.70 GHz
Input range (high band)	11.70...12.75 GHz
Output range (low band)	950...1950 MHz
Output range (high band)	1100...2150 MHz
L.O. (low band)	9.75 GHz
L.O. (high band)	10.60 GHz
Stability @ +2...5oC	±1.0MHz (Max.)
Stability @ -30...+70oC	±2.0MHz (Max.)

Gain	
Conversion gain	60 dB (Typ.)
Gain flatness	±0.5dB/27MHz
Noise figure	0.6dB (Typ.)

Isolation	
Cross polarization (Min.)	20dB

Electrical	
Impedance	75Ω
L.O. Phase Noise @ 1KHz	-75dBc/Hz
L.O. Phase Noise @ 10KHz	-80dBc/Hz
L.O. Phase Noise @ 100KHz	-90dBc/Hz
Image rejection	40dB (Min.)
Output VSWR	2.0:1 (Typ.)
P1dB	0dBm (Min.)
Band switching (Low):	0Hz
Band switching (High):	22KHz ± 4KHz
POL switching voltage (Low)	10.5...14.0V
POL switching voltage (High)	16.0...20.0V

Connectors	
No of outputs	4
Connector	F-female

EAN-13	
Code	5213009761062

General	
Consumption	220mA (Typ.)
Housing material	PVC with UV filter
Operating temperature	0 °C to 40 °C
Storage temperature	-30 °C to +70 °C
Humidity	Up to 90%
Dimensions	117 x 38.5 x 28mm
Weight	240gr



LNB-202

TWIN KU-BAND LNB WITH UV FILTER

The LNB-202 is a twin KU-band LNB of excellent performance. It's UV filter on the cap ensures long time longevity even under hard environment conditions while it's small size offer the maximum flexibility.

Technical Specifications

Frequency	
Input range (low band)	10.70...11.70 GHz
Input range (high band)	11.70...12.75 GHz
Output range (low band)	950...1950 MHz
Output range (high band)	1100...2150 MHz
L.O. (low band)	9.75 GHz
L.O. (high band)	10.60 GHz
Stability @ +2...5oC	±1.0MHz (Max.)
Stability @ -30...+70oC	±2.0MHz (Max.)

Gain	
Conversion gain	60 dB (Typ.)
Gain flatness	±0.5dB/27MHz
Noise figure	0.3dB (Typ.)

Isolation	
Cross polarization (Min.)	20dB

Electrical	
Impedance	75Ω
L.O. Phase Noise @ 1KHz	-75dBc/Hz
L.O. Phase Noise @ 10KHz	-80dBc/Hz
L.O. Phase Noise @ 100KHz	-90dBc/Hz
Image rejection	40dB (Min.)
Output VSWR	2.0:1 (Typ.)

P1dB	0dBm (Min.)
Band switching (Low):	0Hz
Band switching (High):	22KHz ± 4KHz
POL switching voltage (Low)	10.5...14.0V
POL switching voltage (High)	16.0...20.0V

Connectors	
No of outputs	2
Connector	F-female

EAN-13	
Code	5213009761048

General	
Consumption	130mA (Typ.)
Housing material	PVC with UV filter
Operating temperature	0 °C to 40 °C
Storage temperature	-30 °C to +70 °C
Humidity	Up to 90%
Dimensions	52.5 x 38.5 x 28mm
Weight	175gr

LNB-404

QUAD KU-BAND LNB WITH UV FILTER

The LNB-404 is a Quad KU-band LNB of excellent performance. It's UV filter on the cap ensures long time longevity even under hard enviroment conditions while it's small size offer the maximum flexibility.

Technical Specifications

Frequency	
Input range (low band)	10.70...11.70 GHz
Input range (high band)	11.70...12.75 GHz
Output range (low band)	950...1950 MHz
Output range (high band)	1100...2150 MHz
L.O. (low band)	9.75 GHz
L.O. (high band)	10.60 GHz
Stability @ +2...5oC	±1.0MHz (Max.)
Stability @ -30...+70oC	±2.0MHz (Max.)
Gain	
Conversion gain	60 dB (Typ.)
Gain flatness	±0.5dB/27MHz
Noise figure	0.3dB (Typ.)
Isolation	
Cross polarization (Min.)	20dB
Electrical	
Impedance	75Ω
L.O. Phase Noise @ 1KHz	-75dBc/Hz
L.O. Phase Noise @ 10KHz	-80dBc/Hz
L.O. Phase Noise @ 100KHz	-90dBc/Hz
Image rejection	40dB (Min.)
Output VSWR	2.0:1 (Typ.)



P1dB	0dBm (Min.)
Band switching (Low):	0Hz
Band switching (High):	22KHz ± 4KHz
POL switching voltage (Low)	10.5...14.0V
POL switching voltage (High)	16.0...20.0V

Connectors	
No of outputs	4
Connector	F-female

EAN-13	
Code	5213009761055

General	
Consumption	130mA (Typ.)
Housing material	PVC with UV filter
Operating temperature	0 °C to 40 °C
Storage temperature	-30 °C to +70 °C
Humidity	Up to 90%
Dimensions	75 x 38.5 x 28mm
Weight	220gr

PROFESSIONAL BISS CAM

Conditional Access Module for BISS applications.

CAM-002 is a professional BISS CAM for 8 channel services to be used on Professional Head-end devices that can descramble multi-channels simultaneously. Professional CAMs are widely used at TV stations, hotels and hospitals. They can work stably in different environment 7x24h.

CAM-002

Technical Specifications

Reception

Encryption	BISS
Decrypt	Multi-PIDs
Max. number of channels	8
Number of PIDs	64
TS process bandwidth	Up to 96 Mbps

User Interface

Parental control	Yes
Multilingual	Yes
Plug and Play	Yes
OTA soft download	per satellite

EAN-13

Code	5213009761024
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General

Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	PCMCIA Type II
Weight	33 gr

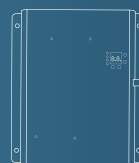
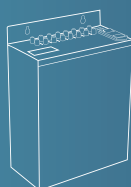
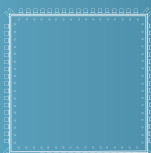


ACCESSORIES

Power supply unit for Cascade multiswitches



EAN-13	
Code	5213009760812
General	
Category	Power supply
Input	100-240VAC, 1.8A, 50/60Hz
Output	18VDC, 2.5A



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



RF SPLITTERS

Satellite • Terrestrial

SATELLITE

Satellite RF splitters with excellent performance and linearity.



LSP 202

Technical Specifications

Electrical	
Frequency range	10-2610MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤4.0dB
40-1000 MHz	≤4.5dB
1000-1750 MHz	≤5.0dB
1750-2400 MHz	≤5.5dB
Return Loss (in-out)	
5-40 MHz	≥10.0dB
40-1000 MHz	≥12.0dB
1000-1750 MHz	≥12.0dB
1750-2400 MHz	≥10.0dB
Isolation (out-out)	
5-40 MHz	≥18.0dB
40-1000 MHz	≥22.0dB
1000-1750 MHz	≥20.0dB
1750-2400 MHz	≥20.0dB
All ports are DC passed	15V / 1A
Connectors	
No of inputs	1
No of outputs	2
Connector	F-female
Connector screw thread	3/8"-32UNEF inch
EAN-13	
Code	5213009760638
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	55.8 x 47.8 x 16mm
Weight	33.5 gr



LSP-203

Technical Specifications

Electrical	
Frequency range	10-2610MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤7.5dB
40-1000 MHz	≤8.0dB
1000-1750 MHz	≤9.5dB
1750-2400 MHz	≤10.5dB
Return Loss (in-out)	
5-40 MHz	≥10.0dB
40-1000 MHz	≥12.0dB
1000-1750 MHz	≥12.0dB
1750-2400 MHz	≥10.0dB
Isolation (out-out)	
5-40 MHz	≥22.0dB
40-1000 MHz	≥20.0dB
1000-1750 MHz	≥20.0dB
1750-2400 MHz	≥20.0dB
All ports are DC passed	15V / 1A
Connectors	
No of inputs	1
No of outputs	3
Connector	F-female
Connector screw thread	3/8"-32UNEF inch
EAN-13	
Code	5213009760645
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	77 x 47.8 x 16mm
Weight	43.5 gr

LSP-204

Technical Specifications

Electrical

Frequency range	10-2610MHz
Impedance	75Ω

Insertion loss (in-out)

5-40 MHz	≤8.0dB
40-1000 MHz	≤8.5dB
1000-1750 MHz	≤9.5dB
1750-2400 MHz	≤11.0dB

Return Loss (in-out)

5-40 MHz	≥10.0dB
40-1000 MHz	≥12.0dB
1000-1750 MHz	≥12.0dB
1750-2400 MHz	≥10.0dB

Isolation (out-out)

5-40 MHz	≥22.0dB
40-1000 MHz	≥20.0dB
1000-1750 MHz	≥20.0dB
1750-2400 MHz	≥20.0dB
All ports are DC passed	15V / 1A



Connectors

No of inputs	1
No of outputs	4
Connector	F-female
Connector screw thread	3/8"-32UNEF inch

EAN-13

Code	5213009760652
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General

Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	77 x 47.8 x 16mm
Weight	45.0 gr



LSP-206

Technical Specifications

Electrical

Frequency range	10-2610MHz
Impedance	75Ω

Insertion loss (in-out)

5-40 MHz	≤10.5dB
40-1000 MHz	≤11.0dB
1000-1750 MHz	≤12.5dB
1750-2400 MHz	≤15.5dB

Return Loss (in-out)

5-40 MHz	≥10.0dB
40-1000 MHz	≥12.0dB
1000-1750 MHz	≥12.0dB
1750-2400 MHz	≥10.0dB

Isolation (out-out)

5-40 MHz	≥22.0dB
40-1000 MHz	≥20.0dB
1000-1750 MHz	≥20.0dB
1750-2400 MHz	≥20.0dB
All ports are DC passed	15V / 1A

Connectors

No of inputs	1
No of outputs	6
Connector	F-female
Connector screw thread	3/8"-32UNEF inch

EAN-13

Code	5213009760669
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General

Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	114.5 x 55.8 x 16mm
Weight	77.5 gr

LSP-208

Technical Specifications

Electrical

Frequency range	10-2610MHz
Impedance	75Ω

Insertion loss (in-out)

5-40 MHz	≤12.0dB
40-1000 MHz	≤12.5dB
1000-1750 MHz	≤14.5dB
1750-2400 MHz	≤16.0dB

Return Loss (in-out)

5-40 MHz	≥10.0dB
40-1000 MHz	≥12.0dB
1000-1750 MHz	≥12.0dB
1750-2400 MHz	≥10.0dB

Isolation (out-out)

5-40 MHz	≥22.0dB
40-1000 MHz	≥20.0dB
1000-1750 MHz	≥20.0dB
1750-2400 MHz	≥20.0dB
All ports are DC passed	15V / 1A

Connectors

No of inputs	1
No of outputs	8
Connector	F-female
Connector screw thread	3/8"-32UNEF inch

EAN-13

Code	5213009760676
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General

Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	114.5 x 55.8 x 16mm
Weight	83.5 gr



TERRESTRIAL

Two different series of Terrestrial RF splitters with excellent performance and linearity.



LSP-102

Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤3.5dB max
40-470 MHz	≤3.6dB max
470-860 MHz	≤3.8dB max
860-1000 MHz	≤4.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥30.0dB
5-40 MHz	≥30.0dB
470-860 MHz	≥28.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	2
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009760683
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	55.8 x 47.8 x 16mm
Weight	33.5 gr



LSP-103

Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤6.0dB max
40-470 MHz	≤6.0dB max
470-860 MHz	≤5.8dB max
860-1000 MHz	≤6.2dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
5-40 MHz	≥28.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	3
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009760690
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	77 x 47.8 x 16mm
Weight	43.5 gr

LSP-104



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤7.0dB max
40-470 MHz	≤7.0dB max
470-860 MHz	≤7.5dB max
860-1000 MHz	≤8.2dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥27.0dB
5-40 MHz	≥30.0dB
470-860 MHz	≥30.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	4
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009760706
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	77 x 47.8 x 16mm
Weight	45.0 gr



LSP-108

Technical Specifications

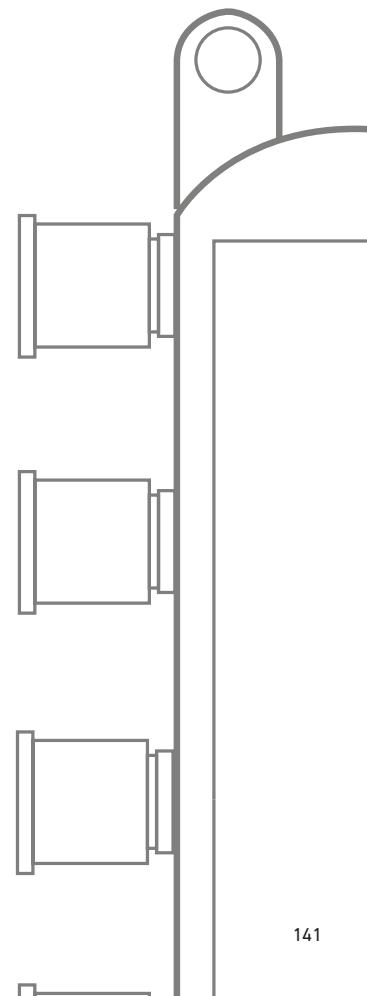
Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤10.5dB max
40-470 MHz	≤10.5dB max
470-860 MHz	≤11.5dB max
860-1000 MHz	≤12.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
5-40 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	8
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009760720
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0°C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	114,5 x 55.8 x 16mm
Weight	83.5 gr

LSP-106



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤9.0dB max
40-470 MHz	≤9.0dB max
470-860 MHz	≤9.5dB max
860-1000 MHz	≤10.5dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
5-40 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	6
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009760713
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	114.5 x 55.8 x 16mm
Weight	77.5 gr



LSP-1002



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5 - 40 MHz	≤ 3.5dB max
40 - 470 MHz	≤ 3.6dB max
470 - 860 MHz	≤ 3.8dB max
860 - 1000 MHz	≤ 4.0dB max
Return Loss (in-out)	
5 - 40 MHz	≥ 25.0dB
40 - 470 MHz	≥ 25.0dB
470 - 860 MHz	≥ 22.0dB
860 - 1000 MHz	≥ 20.0dB
Isolation (out-out)	
5-40 MHz	≥30.0dB
40-470 MHz	≥30.0dB
470-860 MHz	≥28.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	2
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761642
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	52.5 x 38.5 x 28mm
Weight	50.0 gr

LSP-1003



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤5.5dB max
40-470 MHz	≤5.5dB max
470-860 MHz	≤6.0dB max
860-1000 MHz	≤6.2dB max
Return Loss (in-out)	
5-40 MHz	≥22.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
Isolation (out-out)	
5-40 MHz	≥30.0dB
40-470 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	3
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761659
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70°C
Humidity	Up to 90%
Dimensions	52.5 x 38.5 x 28mm
Weight	52.5 gr

LSP-1004



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤7.0dB max
40-470 MHz	≤7.2dB max
470-860 MHz	≤7.6dB max
860-1000 MHz	≤8.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
Isolation (out-out)	
5-40 MHz	≥35.0dB
40-470 MHz	≥30.0dB
470-860 MHz	≥28.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V

Connectors	
No of inputs	1
No of outputs	4
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761666
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	75 x 38.5 x 28mm
Weight	69.0 gr

LSP-1006



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤10.0dB max
40-470 MHz	≤10.0dB max
470-860 MHz	≤10.5dB max
860-1000 MHz	≤11.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
40-470 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	6
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761673
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	117 x 38.5 x 28mm
Weight	122.0 gr

LSP-1008



Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤10.5dB max
40-470 MHz	≤11.0dB max
470-860 MHz	≤11.5dB max
860-1000 MHz	≤12.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
Isolation (out-out)	
5-40 MHz	≥30.0dB
40-470 MHz	≥27.0dB
470-860 MHz	≥27.0dB
860-1000 MHz	≥25.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	8
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761680
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	117 x 38.5 x 28mm
Weight	122.0 gr

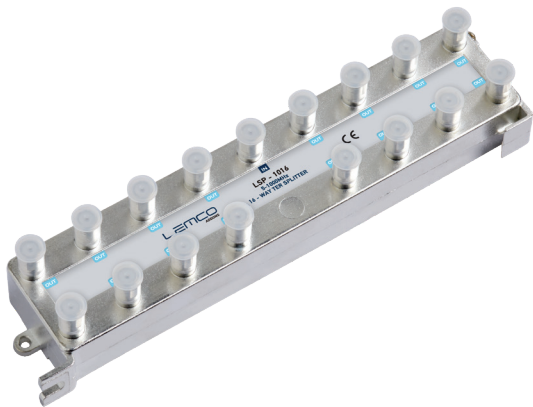


LSP-1012

Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤12.5dB max
40-470 MHz	≤12.5dB max
470-860 MHz	≤13.5dB max
860-1000 MHz	≤14.5dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
40-470 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥22.0dB
All ports are DC Block	50V

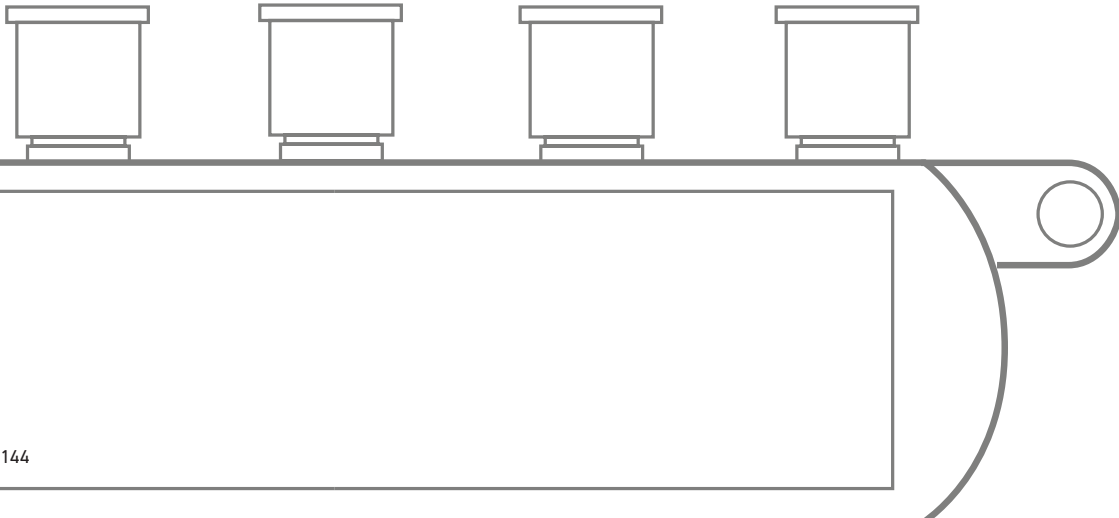
Connectors	
No of inputs	1
No of outputs	12
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761697
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	175 x 43 x 33mm
Weight	245.0 gr



LSP-1016

Technical Specifications

Electrical	
Frequency range	5-1000MHz
Impedance	75Ω
Insertion loss (in-out)	
5-40 MHz	≤14.5dB max
40-470 MHz	≤14.5dB max
470-860 MHz	≤15.5dB max
860-1000 MHz	≤16.0dB max
Return Loss (in-out)	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
Isolation (out-out)	
5-40 MHz	≥25.0dB
40-470 MHz	≥25.0dB
470-860 MHz	≥25.0dB
860-1000 MHz	≥22.0dB
All ports are DC Block	50V
Connectors	
No of inputs	1
No of outputs	16
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
EAN-13	
Code	5213009761703
General	
Housing material	Zinc Alloy Die-cast
Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	235 x 54.5 x 35mm
Weight	335.0 gr



Lemco expanded

We are growing



Estimated from 1975, Lemco main core business of designing, developing and producing appliances in-house for TV signal distribution over RF and IP.



Taking advantage of Lemco's experience in hardware, firmware and software development Lemco Development sub-branch is able to design your complete custom need for any project.



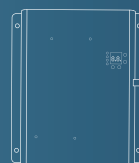
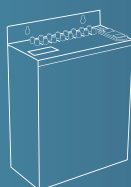
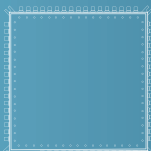
Using our more than 45 years of experience in digital technologies Lemco Integrator sub-branch offers high quality services of installation in any upcoming project.



Our passion for video games and more led to the opportunity to create a sub-branch to enter in video games development industry.

Visit our website for more information:

www.lemco.gr



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



RF Filters-Diplexers



BPF-118-440

VHF Band pass filter 118MHz to 440MHz

Technical Specifications

Electrical	
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Pass Band	118...440MHz
Insertion loss	2.5dB
Return loss	16dB
1st Stop Band	5...106MHz
Rejection (5...106MHz)	50dB
Rejection (110MHz)	30dB
2nd Stop Band	460...1000MHz
Rejection (468...1000MHz)	55dB
Rejection (460MHz)	30dB
Connectors	
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No
EAN-13	
Number	5213009761406
General	
Operating temperature	0 ° C to 40 ° C
Storage temperature	-10 ° C to +70 ° C
Humidity	Up to 90%
Dimensions	Φ21 * 73mm
Weight	52 gr



BPF-470-790

4G Band pass filter 470MHz to 790MHz

Technical Specifications

Electrical	
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Pass Band	470...790MHz
Insertion loss	2.5dB
Return loss	16dB
1st Stop Band	5...440MHz
Rejection (5...432MHz)	50dB
Rejection (440MHz)	32dB
2nd Stop Band	810...1000MHz
Rejection (835...1000MHz)	50dB
Rejection (810MHz)	20dB
Connectors	
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No
EAN-13	
Number	5213009761413
General	
Operating temperature	0 ° C to 40 ° C
Storage temperature	-10 ° C to +70 ° C
Humidity	Up to 90%
Dimensions	42 x 13mm
Weight	55 gr



BPF-470-694

5G Band pass filter 470MHz to 694MHz

Technical Specifications

Electrical	
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Pass Band	470...694MHz
Insertion loss	± 1dB
Return loss	≥ 14dB
1st Stop Band	5...404MHz
Rejection (5...404MHz)	45dB approx.
2nd Stop Band	763...1000MHz
Rejection (763...1000MHz)	40dB approx.
Connectors	
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No
EAN-13	
Number	5213009761420
General	
Operating temperature	0 ° C to 40 ° C
Storage temperature	-10 ° C to +70 ° C
Humidity	Up to 90%
Dimensions	57.5 x 17 x 17mm
Weight	27 gr



BPF-88-108

FM Band pass filter 88MHz to 108MHz

Technical Specifications

Electrical	
Frequency range	5...1000MHz
Impedance (IN/OUT)	75Ω
Pass Band	88...108MHz
Insertion loss (118...440MHz)	2.5dB
Return loss (118...440MHz)	≥ 16dB
1st Stop Band	5...75MHz
Rejection (5...434MHz)	52dB approx.
2nd Stop Band	124...1000MHz
Rejection (440...434MHz)	55dB approx.
Connectors	
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No
EAN-13	
Number	5213009761741
General	
Operating temperature	0 ° C to 40 ° C
Storage temperature	-10 ° C to +70 ° C
Humidity	Up to 90%
Dimensions	57.5 x 17 x 17mm
Weight	27 gr

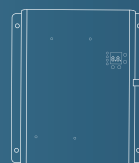
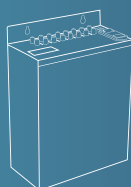
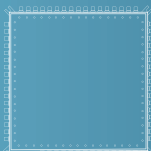


LDI-100

5-2150MHZ SAT/ANT diplexer

Technical Specifications

Electrical	
Impedance (IN/OUT)	75Ω
IN-ANT	
Frequency range	5...806MHz
Insertion loss	≤1.5dB
Return loss	≥ 11dB
Frequency range	950...2150MHz
Insertion loss	≥25dB
Return loss	N/A
IN-SAT	
Frequency range	5...806MHz
Insertion loss	≥25dB
Return loss	N/A
Frequency range	950...2150MHz
Insertion loss	≤1.5dB
Return loss	≥ 11dB
Connectors	
No of inputs	2
No of outputs	1
Connector	F-female
DC Pass	Yes
EAN-13	
Number	5213009761376
General	
Operating temperature	0 ° C to 40 ° C
Storage temperature	-10 ° C to +70 ° C
Humidity	Up to 90%
Dimensions	55.8 x 47.8 x 16mm
Weight	34 gr



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



CONNECTORS

F · IEC · BNC · Adaptors · Tools

F TYPE

High quality F-connectors, made of copper, providing excellent performance and electromagnetic shielding.

LFC-001

Technical Specifications

Characteristics

Type	F male twist-on connector
O-ring	Yes, EPDM
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401
Compatible tool	LTC-003,LTC-004

Electrical

Frequency	0,3-3000MHz
Impedance	75Ω

Insertion Loss

0,3-500 MHz	< 0,12dB
500-860 MHz	< 0,12dB
860-1000 MHz	< 0,12dB
1000-1750 MHz	< 0,16dB
1750-2150 MHz	< 0,16dB
2150-3000 MHz	< 0,20dB

Base Material

Body Parts	Brass CuZn 39Pb3 / Zinc
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Plating

Body Parts	Nickel
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Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761437
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General

Dimensions	20*11mm
Net weight	3.4gr
Package qty	100pcs



LFC-002

Technical Specifications

Characteristics

Type	F male compression connector (Super edition)
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-002,LTC-003,LTC-004

Electrical

Frequency	0,3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 140dB @ 30-1000MHz > 120dB @ 1000-3000MHz

Insertion Loss

0,3-500 MHz	< 0,01dB
500-860 MHz	< 0,01dB
860-1000 MHz	< 0,01dB
1000-1750 MHz	< 0,01dB
1750-2150 MHz	< 0,01dB
2150-3000 MHz	< 0,01dB

Return Loss

0,3-500 MHz	- 40,6dB
500-860 MHz	- 38,4dB
860-1000 MHz	- 37,1dB
1000-1750 MHz	- 33,9dB
1750-2150 MHz	- 31,9dB
2150-3000 MHz	- 28,3dB

Base Material

Body Parts	Brass CuZn 39Pb3 / Zinc
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Plating

Body Parts	Nickel
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Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761444
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General

Max. Tensile strength	230N
Dimensions	24,55*11mm (compressed)
Net weight	11.2gr
Package qty	100pcs



860-1000 MHz	- 39,9dB
1000-1750 MHz	- 36,7dB
1750-2150 MHz	- 34,7dB
2150-3000 MHz	- 31,1dB

Base Material

Body Parts	Brass CuZn 39Pb3 / Zinc
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Plating

Body Parts	Nickel
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Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761451
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General

Max. Tensile strength	260N
Dimensions	25,65*11mm (compressed)
Net weight	9.4gr
Package qty	100pcs

LFC-003

Technical Specifications

Characteristics

Type	F male compression
O-ring	Yes, EPDM
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-001, LTC-002,LTC-003,LTC-004

Electrical

Frequency	0,3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 130dB @ 30-1000MHz > 120dB @ 1000-3000MHz

Insertion Loss

0,3-500 MHz	< 0,01dB
500-860 MHz	< 0,01dB
860-1000 MHz	< 0,01dB
1000-1750 MHz	< 0,01dB
1750-2150 MHz	< 0,01dB
2150-3000 MHz	< 0,01dB

Return Loss

0,3-500 MHz	- 43,4dB
500-860 MHz	- 41,2dB

LFC-004



Technical Specifications

Characteristics	
Type	75Ω termination load connector
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 130dB @ 30-1000MHz > 120dB @ 1000-3000MHz
Insertion Loss	
0.3-500 MHz	< 0,01dB
500-860 MHz	< 0,01dB
860-1000 MHz	< 0,01dB
1000-1750 MHz	< 0,01dB
1750-2150 MHz	< 0,01dB
2150-3000 MHz	< 0,01dB
Return Loss	
0.3-500 MHz	– 40dB
500-860 MHz	– 40dB
860-1000 MHz	– 40dB
1000-1750 MHz	– 30dB
1750-2150 MHz	– 30dB
2150-3000 MHz	– 22dB
Base Material	
Body Parts	Brass CuZn 39Pb3 / Zinc
Inner conductor	Brass CuZn 39Pb3
Plating	
Body Parts	Nickel
Inner conductor	Gold
Temperature	
Installation	– 5° to + 50°C
Operation	– 40° to + 100°C
Storing	– 40° to + 100°C
EAN-13	
Code	5213009761468
General	
Dimensions	14.50*11mm (compressed)
Net weight	5.4gr
Package qty	100pcs

LFC-005



Technical Specifications

Characteristics	
Type	F quick male compression connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-002,LTC-003,LTC-004
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 140dB @ 30-1000MHz > 120dB @ 1000-3000MHz
Insertion Loss	
0.3-500 MHz	< 0,01dB
500-860 MHz	< 0,01dB
860-1000 MHz	< 0,01dB
1000-1750 MHz	< 0,01dB
1750-2150 MHz	< 0,01dB
2150-3000 MHz	< 0,01dB
Return Loss	
0.3-500 MHz	– 40,6dB
500-860 MHz	– 38,4dB
860-1000 MHz	– 37,1dB
1000-1750 MHz	– 33,9dB
1750-2150 MHz	– 31,9dB
2150-3000 MHz	– 28,3dB
Base Material	
Body Parts	Brass CuZn 39Pb3 / Zinc
Plating	
Body Parts	Nitin
Temperature	
Installation	– 5° to + 50°C
Operation	– 40° to + 100°C
Storing	– 40° to + 100°C
EAN-13	
Code	5213009761475
General	
Max. Tensile strength	230N
Dimensions	24.55*11mm (compressed)
Net weight	5gr
Package qty	100pcs

LFC-006



Technical Specifications

Characteristics	
Type	F quick male push-on connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-003,LTC-004
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 140dB @ 30-1000MHz > 120dB @ 1000-3000MHz
Insertion Loss	
0.3-500 MHz	< 0,01dB
500-860 MHz	< 0,01dB
860-1000 MHz	< 0,01dB
1000-1750 MHz	< 0,01dB
1750-2150 MHz	< 0,01dB
2150-3000 MHz	< 0,01dB
Return Loss	
0.3-500 MHz	– 40,6dB
500-860 MHz	– 38,4dB
860-1000 MHz	– 37,1dB
1000-1750 MHz	– 33,9dB
1750-2150 MHz	– 31,9dB
2150-3000 MHz	– 28,3dB

Base Material	
Body Parts	Brass CuZn 39Pb3 / Zinc
Plating	
Body Parts	Nickel
Temperature	
Installation	– 5° to + 50°C
Operation	– 40° to + 100°C
Storing	– 40° to + 100°C
EAN-13	
Code	5213009761482
General	
Dimensions	25.55*12.95mm (compressed)
Net weight	5.4gr
Package qty	100pcs

IEC TYPE

The HD High quality F-connectors, made of copper, providing excellent performance and electromagnetic shielding. MOD series of HDMI DVB-T modulators provides the ability to distribute any HDMI source, i.e. coming from DVD or Blu-ray player over RF DVB-T.

LIC-001



Technical Specifications

Characteristics

Type	Metal 90 degree IEC male connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401
Compatible tool	No tool requirement

Electrical

Frequency	0,3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>85dB@1GHz

Insertion Loss

0,3-500 MHz	
500-860 MHz	
860-1000 MHz	< 0,26 dB
1000-1750 MHz	
1750-2150 MHz	
2150-3000 MHz	

Return Loss

0,3-500 MHz	
500-860 MHz	
860-1000 MHz	- 17,8 dB
1000-1750 MHz	
1750-2150 MHz	
2150-3000 MHz	

Base Material

Body Parts	Zinc Alloy
Inner conductor	Brass

Plating

Body Parts	Nickel
Inner conductor	Gold

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761499
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General

Dimensions	33.55*38.4mm
Net weight	21.4gr
Package qty	100pcs

LIC-002



Technical Specifications

Characteristics

Type	Metal 90 degree IEC female connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401
Compatible tool	No tool requirement

Electrical

Frequency	0,3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>85dB@1GHz

Insertion Loss

0,3-500 MHz	
500-860 MHz	
860-1000 MHz	< 0,26 dB
1000-1750 MHz	
1750-2150 MHz	
2150-3000 MHz	

Return Loss

0,3-500 MHz	
500-860 MHz	
860-1000 MHz	- 12,8 dB
1000-1750 MHz	
1750-2150 MHz	
2150-3000 MHz	

Base Material

Body Parts	Zinc Alloy
Inner conductor	Brass

Plating

Body Parts	Nickel
Inner conductor	Gold

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761505
------	---------------

General

Dimensions	33.55*38.4mm
Net weight	22.2gr
Package qty	100pcs

LIC-003



Technical Specifications

Characteristics

Type	IEC male connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401
Compatible tool	No tool requirement

Electrical

Frequency	1-1000MHz
Impedance	75Ω

Insertion Loss

Return Loss

Base Material

Body Parts	Zinc Alloy
Inner conductor	Brass

Plating

Body Parts	Nature
Inner conductor	Nickel

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761512
------	---------------

General

Dimensions	40*16.4mm
Net weight	6gr
Package qty	100pcs

LIC-004



Technical Specifications

Characteristics

Type	IEC female connector
O-ring	No
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401
Compatible tool	No tool requirement

Electrical

Frequency	1-1000MHz
Impedance	75Ω

Insertion Loss

Return Loss

Base Material

Body Parts	Zinc Alloy
Inner conductor	Brass

Plating

Body Parts	Nature
Inner conductor	Nickel

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761529
------	---------------

General

Dimensions	39*16mm (compressed)
Net weight	6.2gr
Package qty	100pcs

LIC-006



Technical Specifications

Characteristics

Type	IEC female compression
O-ring	Yes, EPDM
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-001, LTC-002

Electrical

Frequency	1-1000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

0,3-500 MHz	< 0,11 dB
500-860 MHz	< 0,15 dB
860-1000 MHz	< 0,21 dB
1000-1750 MHz	< 0,29 dB
1750-2150 MHz	< 0,35 dB
2150-3000 MHz	< 0,40 dB

Return Loss

0,3-500 MHz	- 30,1 dB
500-860 MHz	- 26,3 dB
860-1000 MHz	- 25,4 dB
1000-1750 MHz	- 23,5 dB
1750-2150 MHz	- 20,5 dB
2150-3000 MHz	- 20,0 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nitin
Inner conductor	Nitin

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009760973
------	---------------

General

Max. Tensile strength	245N
Dimensions	29.35*11mm (compressed)
Net weight	17.4gr
Package qty	100pcs

LIC-005



Technical Specifications

Characteristics

Type	IEC male compression
O-ring	Yes, EPDM
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-001, LTC-002

Electrical

Frequency	1-1000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

0,3-500 MHz	< 0,11 dB
500-860 MHz	< 0,15 dB
860-1000 MHz	< 0,21 dB
1000-1750 MHz	< 0,29 dB
1750-2150 MHz	< 0,35 dB
2150-3000 MHz	< 0,40 dB

Return Loss

0,3-500 MHz	- 30,3 dB
500-860 MHz	- 27,3 dB
860-1000 MHz	- 25,8 dB
1000-1750 MHz	- 23,8 dB
1750-2150 MHz	- 20,6 dB
2150-3000 MHz	- 19,6 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nitin
Inner conductor	Nitin

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009760966
------	---------------

General

Max. Tensile strength	245N
Dimensions	28.35*11mm (compressed)
Net weight	9.4gr
Package qty	100pcs

BNC TYPE

High quality F-connectors, made of copper, providing excellent performance and electromagnetic shielding.

LBC-001



Technical Specifications

Characteristics

Type	BNC male compression
O-ring	Yes, EPDM
Cable compatibility	6,7-7,0mm outer
Lemco cable compatibility	LC-1200,LC-1401,LC-1411
Compatible tool	LTC-002,LTC-003,LTC-004

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	> 140dB @ 30-1000MHz

Insertion Loss

0,3-500 MHz	< 0,07dB
500-860 MHz	< 0,10dB
860-1000 MHz	< 0,14dB
1000-1750 MHz	< 0,18dB
1750-2150 MHz	< 0,21dB
2150-3000 MHz	< 0,26dB

Return Loss

0,3-500 MHz	– 34,0dB
500-860 MHz	– 30,7dB
860-1000 MHz	– 26,7dB
1000-1750 MHz	– 23,4 B
1750-2150 MHz	– 21,1dB
2150-3000 MHz	– 19,5dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Gold

Temperature

Installation	– 5° to + 50°C
Operation	– 40° to + 100°C
Storing	– 40° to + 100°C

EAN-13

Code	5213009760980
------	---------------

General

Max. Tensile strength	250N
Dimensions	33.5*14.35mm (compressed)
Net weight	17.4gr
Package qty	100pcs

RF ADAPTORS

High quality F-connectors, made of copper, providing excellent performance and electromagnetic shielding.

LAC-001

Technical Specifications

Characteristics

Type	90 degree F female to IEC male adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB

Return Loss

5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Silver

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761536
------	---------------

General

Dimensions	22*24mm
Net weight	10.4gr
Package qty	100pcs



LAC-002

Technical Specifications

Characteristics

Type	90 degree F female to IEC female adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB

Return Loss

5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Silver

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761543
------	---------------

General

Dimensions	22*24mm
Net weight	11.2gr
Package qty	100pcs



LAC-003

Technical Specifications

Characteristics

Type	F female to F female adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB

Return Loss

5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB

300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Phosphor bronze per QQ-B-750

Plating

Body Parts	Nickel
Inner conductor	Gold

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761550
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General

Dimensions	26.65*11mm
Net weight	4.8gr
Package qty	100pcs



LAC-004



Technical Specifications

Characteristics	
Type	F female to F quick male adaptor
Compatible tool	No tool requirement
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz
Insertion Loss	
5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB
1000 - 1750 MHz	< 0,05 dB
1750 - 2200 MHz	< 0,07 dB
2200 - 3000 MHz	< 0,12 dB
Return Loss	
5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB
Base Material	
Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3
Plating	
Body Parts	Nickel
Inner conductor	Silver
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761567
General	
Dimensions	25*11.35mm
Net weight	5.4gr
Package qty	100pcs

LAC-005



Technical Specifications

Characteristics	
Type	F female to IEC male adaptor
Compatible tool	No tool requirement
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz
Insertion Loss	
5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB
Return Loss	
5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB
Base Material	
Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3
Plating	
Body Parts	Nickel
Inner conductor	Silver
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761574
General	
Dimensions	26.30*10.40mm
Net weight	5gr
Package qty	100pcs

LAC-006



Technical Specifications

Characteristics	
Type	F female to IEC female adaptor
Compatible tool	No tool requirement
Electrical	
Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz
Insertion Loss	
5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB
Return Loss	
5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material	
Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3
Plating	
Body Parts	Nickel
Inner conductor	Silver
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761581
General	
Dimensions	24.65*10.40mm
Net weight	5.4gr
Package qty	100pcs

LAC-007



Technical Specifications

Characteristics

Type	F male to IEC male adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB

Return Loss

5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Silver

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761598
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General

Dimensions	27.35*11mm
Net weight	7gr
Package qty	100pcs

LAC-008



Technical Specifications

Characteristics

Type	F male to IEC female adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,01 dB
42 - 70 MHz	< 0,01 dB
70 - 300 MHz	< 0,01 dB
300 - 600 MHz	< 0,02 dB
600 - 862 MHz	< 0,03 dB
862 - 1000 MHz	< 0,03 dB

Return Loss

5 - 42 MHz	- 43,6 dB
42 - 70 MHz	- 43,6 dB
70 - 300 MHz	- 43,6 dB
300 - 600 MHz	- 40,8 dB
600 - 862 MHz	- 37,6 dB
862 - 1000 MHz	- 37,6 dB
1000 - 1750 MHz	- 31,3 dB
1750 - 2200 MHz	- 29,5 dB
2200 - 3000 MHz	- 21,7 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Silver

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009761604
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General

Dimensions	26*11mm
Net weight	6.4gr
Package qty	100pcs

LAC-009



Technical Specifications

Characteristics

Type	90 degree IEC male to IEC female adaptor
Compatible tool	No tool requirement

Electrical

Frequency	0.3-3000MHz
Impedance	75Ω
Shielding Effectiveness	>115dB@1GHz

Insertion Loss

5 - 42 MHz	< 0,12 dB
42 - 70 MHz	< 0,18 dB
70 - 300 MHz	< 0,25 dB
300 - 600 MHz	< 0,31 dB
600 - 862 MHz	< 0,39 dB
862 - 1000 MHz	< 0,45 dB

Return Loss

5 - 42 MHz	- 30,8 dB
42 - 70 MHz	- 27,3 dB
70 - 300 MHz	- 25,6 Db
300 - 600 MHz	- 24,2 dB
600 - 862 MHz	- 18,5 dB
862 - 1000 MHz	- 16,1 dB

Base Material

Body Parts	Brass CuZn 39Pb3
Inner conductor	Brass CuZn 39Pb3

Plating

Body Parts	Nickel
Inner conductor	Nickel

Temperature

Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C

EAN-13

Code	5213009760997
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General

Dimensions	24*21.5mm
Net weight	10gr
Package qty	100pcs

TOOLS

Complete tool series for mounting all the available Lemco connectors.



LTC-001

Technical Specifications

Characteristics	
Type	Compression tool
Compatible Connectors	LFC-003
EAN-13	
Code	5213009761611
General	
Dimensions	14*5cm
Net weight	385gr



LTC-002

Technical Specifications

Characteristics	
Type	Compression tool Supreme
Compatible Connectors	LFC-002,LFC-003,LFC-005
EAN-13	
Code	5213009761628
General	
Dimensions	17.5*5cm
Net weight	500gr



LTC-003

Technical Specifications

Characteristics	
Type	Cable strip tool
Compatible Connectors	NA
EAN-13	
Code	5213009761635
General	
Dimensions	12*7cm
Net weight	82gr



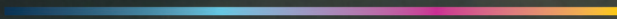
LTC-004

Technical Specifications

Characteristics	
Type	Cable strip tool
Compatible Connectors	NA
EAN-13	
Code	5213009761000
General	
Dimensions	12*2.5cm
Net weight	58gr

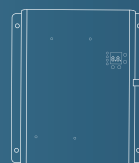
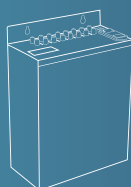
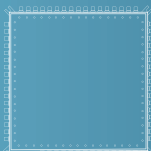


Theron is hunting down the competition



Theron THE-100, is a high quality and reliable "home" terrestrial digital TV receiver with DVB-T/T2 signal reception support. Theron's THE-100 powerful decoder has the ability to decode video signals compressed by the MPEG-2 algorithm, H.264 and H.265 HEVC. It has, an HDMI digital output with a maximum output resolution of up to 1080-60p, an analog Audio/Video output (CVBS) as well as a digital audio output. The THE-100 has a built-in media player for playback of different video file types (i.e. mkv, avi etc.) and audio (i.e. mp3 etc.) as well as a PVR function for recordings, using a USB 2.0 port.





> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



CABLES

Coaxial • HDMI

Coaxial

Also known as TV cables or antenna cables, 75 ohm coaxial cables are present in every building in order to transfer TV signals to TV-sets.



LC-1200

LC-1200 75Ω Class A CuAl

LC-1200 is a coaxial cable with a copper core and a triple shield, class A.

Technical Specifications

Construction

Main Conduit	Ø C 1.00mm pure copper
Insulation	Ø 4.80mm skin-foam-skin
External Conductor	1st aluminum foil bonded to insulation + copper tin wired mesh + 2nd aluminum strip
External Investing	Ø 6.70mm PVC white lead-free

Electrical Features

Advanced Resistance	75 ±3 Ohm
Capacity	53 pF/m
Speed rate (v/c)	0.82
Investment control voltage	4 KV
Shielding (Zt)	Zt 5-30 MHz < 5 mOhm/m
Shielding (As 30-1000Mhz)	> 85 dB
Shielding (As 1000-2000 MHz)	> 75 dB
Shielding (As 2000-3000 MHz)	> 65 dB
Shielding Class (EN 50117)	A

Nominal losses (dB / 100m)

100 MHz	6.3
400 MHz	12.5
860 MHz	19.2
1000 MHz	21.3
1500 MHz	26.2
1750 MHz	28.5
2150 MHz	32.5
2400 MHz	34
3000 MHz	38

EAN-13

Code	5213009760607
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Mechanical features

Minimum Bending Radius	35 mm for a bend 70 mm for repeated bends
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LC-1401

LC-1401 75Ω Class A++ CuCu

LC-1401 is a coaxial cable with copper and triple shielded copper conductor that contains a wire mesh, bronze and tinned, class A ++.

Technical Specifications

Construction

Main Conduit	Ø 1.13mm pure copper
Insulation	Ø 4.80mm skin-foam-skin
External Conductor	1st aluminum strip + aluminum wire mesh + 2nd aluminum strip
External Investing	Ø 6.90mm PVC white lead-free

Electrical Features

Advanced Resistance	75 ±3 Ohm
Capacity	54 pF/m
Speed rate (v/c)	0.84
Investment control voltage	4 KV
Shielding (Zt)	Zt 5-30 MHz < 9 mOhm/m
Shielding (As 30-1000Mhz)	> 85 dB
Shielding (As 1000-2000 MHz)	> 95 dB
Shielding (As 2000-3000 MHz)	> 85 dB
Shielding Class (EN 50117)	A++

Nominal losses (dB / 100m)

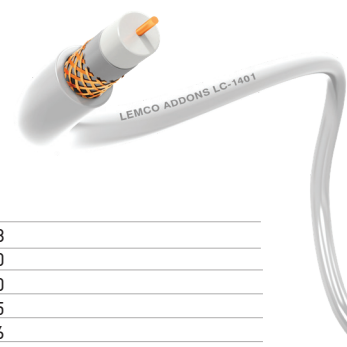
100 MHz	5.8
400 MHz	11.8
860 MHz	17.0
1000 MHz	19.0
1500 MHz	23.5
1750 MHz	25.6
2150 MHz	28.5
2400 MHz	30.3
3000 MHz	34.0

EAN-13

Code	5213009760614
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Mechanical features

Minimum Bending Radius	35 mm for a bend 70 mm for repeated bends
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LC-1411

LC-1411 75Ω Class A++ CuCu PET

LC-1411 is a coaxial cable with copper and triple shielded copper conductor that contains a wire mesh, bronze and tinned, class A ++.

Technical Specifications

Construction

Main Conduit	Ø 1.13mm pure copper
Insulation	Ø 4.80mm skin-foam-skin
External Conductor	1st aluminum strip + aluminum wire mesh + 2nd aluminum strip
External Investing	Ø 6.90mm PVC white lead-free

Electrical Features

Advanced Resistance	75 ±3 Ohm
Capacity	54 pF/m
Speed rate (v/c)	0.84
Investment control voltage	4 KV
Shielding (Zt)	Zt 5-30 MHz < 9 mOhm/m
Shielding (As 30-1000Mhz)	> 105 dB
Shielding (As 1000-2000 MHz)	> 95 dB
Shielding (As 2000-3000 MHz)	> 85 dB

Shielding Class (EN 50117)	(A++)
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Nominal losses (dB / 100m)

100 MHz	5.8
400 MHz	11.8
860 MHz	17.0
1000 MHz	19.0
1500 MHz	23.5
1750 MHz	25.6
2150 MHz	28.5
2400 MHz	30.3
3000 MHz	34.0

EAN-13

Code	5213009760621
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Mechanical features

Minimum Bending Radius	35 mm for a bend 70 mm for repeated bends
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HDMI

Premium HDMI cables, v2.0, offering the best performance in cases we need to transfer a 4K HDMI signal.



LHC-001

Technical Specifications

Characteristics

Version	2.0
Max. resolution	4K @ 60Hz
Bandwidth	18 Gb/s
Encoding	8b / 10b
Audio channels	Up to 32

Electrical

Insulation resistance	50MΩ
Withstanding voltage	500 VDC for 0.1s

Mechanical

Connector	HDMI male(19pin) to HDMI male (19pin)
Material	24K Gold plated
Conductor	5C x 30AWG
Drain Wire	5C x 30AWG
Insulation	5C foamed PE
Mylar	Double AL/MY
Braid	16/4/0,11Al-MIG Tinned
Jacket	Φ 6.00mm BK PVC

EAN-13

Code	5213009761253
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General

Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Length	1m
Weight	0.07Kg

LHC-002

Technical Specifications

Characteristics

Version	2.0
Max. resolution	4K @ 60Hz
Bandwidth	18 Gb/s
Encoding	8b / 10b
Audio channels	Up to 32

Electrical

Insulation resistance	50MΩ
Withstanding voltage	500 VDC for 0.1s

Mechanical

Connector	HDMI male(19pin) to HDMI male (19pin)
Material	24K Gold plated
Conductor	5C x 30AWG
Drain Wire	5C x 30AWG
Insulation	5C foamed PE
Mylar	Double AL/MY
Braid	16/4/0,11Al-MIG Tinned
Jacket	Φ 6.00mm BK PVC

EAN-13

Code	5213009761260
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General

Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Length	2m
Weight	0.11Kg

LHC-003

Technical Specifications

Characteristics

Version	2.0
Max. resolution	4K @ 60Hz
Bandwidth	18 Gb/s
Encoding	8b / 10b
Audio channels	Up to 32

Electrical

Insulation resistance	50MΩ
Withstanding voltage	500 VDC for 0.1s

Mechanical

Connector	HDMI male(19pin) to HDMI male (19pin)
Material	24K Gold plated
Conductor	5C x 30AWG
Drain Wire	5C x 30AWG
Insulation	5C foamed PE
Mylar	Double AL/MY
Braid	16/4/0,11Al-MIG Tinned
Jacket	Φ 6.00mm BK PVC

EAN-13

Code	5213009761277
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General

Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Length	3m
Weight	0.15Kg

LHC-005

Technical Specifications

Characteristics

Version	2.0
Max. resolution	4K @ 60Hz
Bandwidth	18 Gb/s
Encoding	8b / 10b
Audio channels	Up to 32

Electrical

Insulation resistance	50MΩ
Withstanding voltage	500 VDC for 0.1s

Mechanical

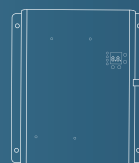
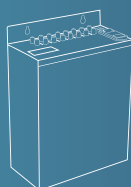
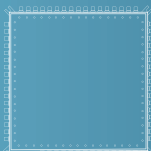
Connector	HDMI male(19pin) to HDMI male (19pin)
Material	24K Gold plated
Conductor	5C x 30AWG
Drain Wire	5C x 30AWG
Insulation	5C foamed PE
Mylar	Double AL/MY
Braid	16/4/0,11Al-MIG Tinned
Jacket	Φ 6.00mm BK PVC

EAN-13

Code	5213009761284
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General

Operating temperature	0 °C to 40 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Length	5m
Weight	0.24Kg



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



SET-TOP-BOX

DVB-T · T2 · S · S2

THE-100

T/T2 H.265 TV Receiver

Theron THE-100, is a high quality and reliable "home" terrestrial digital TV receiver with DVB-T/T2 signal reception support. Theron's THE-100 powerful decoder has the ability to decode video signals compressed by the MPEG-2 algorithm, H.264 and H.265 HEVC. It has, an HDMI digital output with a maximum output resolution of up to 1080-60p, an analog Audio/Video output (CVBS) as well as a digital audio output. The THE-100 has a built-in media player for playback of different video file types (i.e. mkv, avi etc.) and audio (i.e. mp3 etc.) as well as a PVR function for recordings, using a USB 2.0 port.

THE-100 has an external 12V/1A power supply that can be easily replaced in case of failure. Furthermore, the metal case of Theron THE-100 offers an excellent electromagnetic shielding as well as an excellent heat dissipation and robustness, while its small size makes it ideal for all installations especially when there is a limited space.



Features

- DVB-T/T2 receiver
- MPEG-2, H.264 and H.265 HEVC signals decoding
- HDMI & CVBS outputs
- Digital Audio output
- Resolution up to 1080-60p
- Built-in media player
- PVR
- Metal case
- Very small size
- External power supply
- USB port for PVR function & firmware upgrade
- 2 Years Warranty



Technical Specifications

Input	
Type	RF DVB-T/T2
Frequencies	174...230 MHz & 470...862 MHz
Input level	35...90dBuV
Connector	75Ω - IEC, female
Decoder	
Video coding	MPEG-2/H.264/H.265 HEVC
Profile	MPEG2 MP@HL, AVC/H.264 HP@L4.1, MPEG4 ASP, HEVC H 265
Resolution	Up to 1920x1080-60p
HDCP support	Yes
Audio	HDMI & Mono/Stereo
Audio encoding	MPEG2, ACC, AC3
Standard	MPEG-1 Layer II
Audio Bit Rate	64, 96, 128, 192, 256, 320, 384 kbps
Leve	0.5Vpp to 1.0Vpp adjustable
Media player	
Video playback format	avi, mkv, jpg
Audio playback format	MP3, wav,AAC
PVR function	Yes
USB support	Yes, USB 2.0
EPG support	Yes
OSD	Multilingual
LCN support	Yes
LCN Providers	Nordig, ITC/UK, EICTA/Europe, New Zealand

Output	
Type	HDMI, CVBS
Connector	Type A Standard HDMI Female RCA for CVBS
Digital Audio Output	Yes
Connector	RCA
Display	
Number of digits	Four digits
Display segments	4x7
Display color	Green
Finish	Black Mate
Color	Black
General	
Power supply	+12VDC
Power supply consumption	300 mA max.
Operating temperature	0 °C to 50 °C
Storage temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	165.0 x 110 x 40.0 mm
Weight	0.25 Kg

THE-200

DVB-S/S2 TV Receiver



The THE-200 is a very powerful satellite receiver, able to receive satellite (DVB-S/S2), terrestrial (DVB-T/T2). Its powerful decoder of THE-200 is able to decode Mpeg2 and H.264 signals. The THE-200 supports one HDMI output up to 1920*1080 -60p resolution as well as one SCART and one optical audio coax outputs. The embedded player is capable of playing any mkv, avi, mp3, mp4 and BMP files while the user is able to use a USB stick for recording purposes.

The THE-200 uses an external 12VDC @ 1A power supply that can be easily replaced on the field without the need for returning back the receiver.

The embedded web server of the MLF-100 provides a very friendly user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and its powerful features renders the THE-200 the ideal solution in cases we want to receive satellite signal over DVB-S/S2 and display them over HDMI protocol.

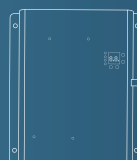
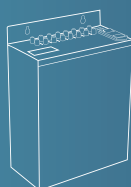
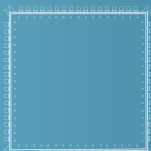
Features

- DVB-S/S2 receiver
- BISS descrambling
- Mpeg-2, H.264 decoding
- HDMI & SCART outputs
- Digital Audio Output
- Resolution up to 1080-60p
- Built-in Media player
- Metal case
- Very small size
- External power supply
- USB port for PVR function & firmware upgrade



Technical Specifications

Input		Output	
Type	4 x DVB-S/S2/T/T2/C	Type	HDMI 1.4
Frequencies	950...2150 MHz DVB-S/S2 118...900MHz DVB-T/T2/C	Resolution	Up to 1080 – 60p
Connector	75Ω - F, female	SCART:	Yes, support
LNB		Coax Audio out:	Yes, support
Voltage	OFF / 13V / 18V	PVR file support	mkv, mp4, mp3, avi, BMP
Current	< 400mA	EPG	Yes
22 KHz signal	On / Off	USB port	USB 2.0
-Voltage	0.65V ±0.35V	General	
-Frequency	22 KHz ±4Hz	Power Supply	1 x +12VDC
-DiSEqC	1.0 (Port A, B, C, D)	Power supply consumption	1.0A max.
DVB-S		Operating Temperature	0 °C to 40 °C
Standard	EN 300-421 V1.1.2	Storage Temperature	-10 °C to +70 °C
Symbol Rate	1 - 55 MBaud	Humidity	Up to 90%
Roll off factor	0.2, 0.25, 0.35	Dimensions	145 x 80 x 35 mm
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8 (automatic)	Weight	0.25 Kg
Spectral Inversion	Reverse, Non-reverse (automatic)		
DVB-S2			
Standard	EN 307-421 V1.2.1		
Constellation	QPSK, 8PSK (automatic)		
Symbol rate	1 - 55 MBaud (QPSK) 1 - 45 MBaud (8PSK)		
Roll off factor	0.2, 0.25, 0.35 (automatic)		
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 8/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)		
Spectral inversion	Reverse, Non-reverse (automatic)		



> Our products

Lemco specializes in the development and production of TV signal broadcasting devices as well as CATV applications. More specifically, our product lines span the following categories:



SOFTWARE

Fleex Prime · Fleex Embedded · Fleex DS · Fleex Streamer
· Fleex PBX · Fleex BMS



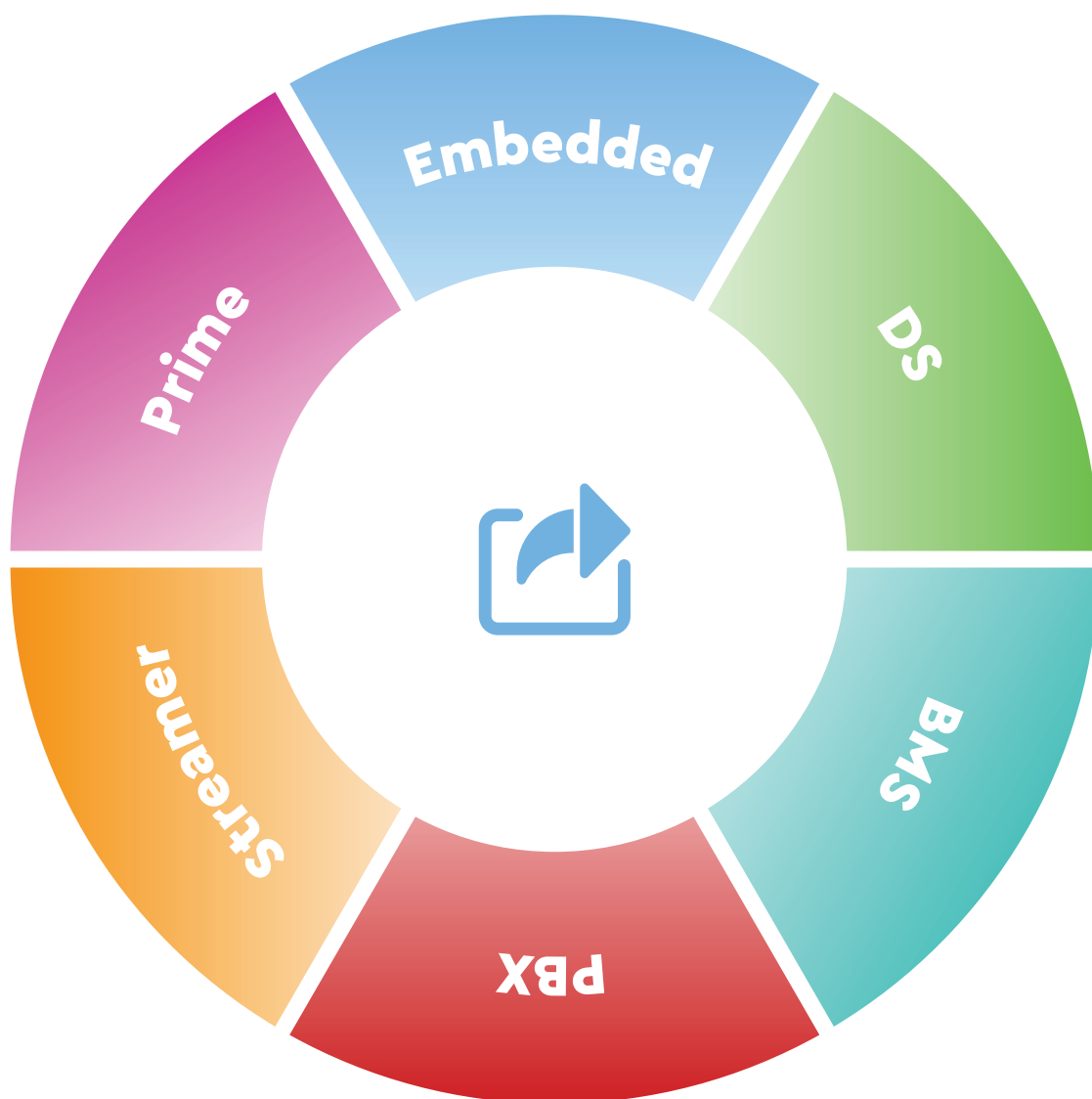
 **FLEEX**

TV just got better...





Fleex is a complete End-to-End IPTV and OTT middleware solution covering any need in the hospitality industry and more.



Content management

Advertise your needs and communicate your news.



Modular design

Select and customize your Fleex to fit in your application and cover 100% of your needs.



Ease of use

Controlling and setting up your Fleex platform has never been easier, all by incorporating one of the most user-friendly interfaces.



Reports & analytics

Evaluate your customers' use of your services by accessing the usage data on viewed content and channels, the device statistics and peak hours.





Fleex Prime is a powerful and versatile software suite designed to cater to the specific needs of the hospitality industry. With a range of features and options, Fleex Prime provides a comprehensive solution for hotel management, including guest room management, billing and payment processing, and more. Enjoy seamless integration with your existing hardware, with Fleex Prime's advanced technology providing a user-friendly and intuitive interface. Streamline your hotel management processes with Fleex Prime, ensuring that your guests have an enjoyable and stress-free stay.

Why Fleex Prime?



Provides a centralized and easy-to-use platform for managing various hotel systems and devices, offering hotel staff a comprehensive solution for hotel management.



Allows hotels to automate different aspects of their property, creating a personalized guest experience while improving operational efficiency.



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Allows hotels to automate different aspects of their property, creating a personalized guest experience while improving operational efficiency.



Enhances the guest experience with interactive TV features, information, and multilingual support, providing guests with a personalized and immersive experience.



Supports leading hotel IPTV brands (LG, Samsung, Philips) and external set-top boxes for hardware flexibility, offering a range of options for hotel hardware.



Provides excellent support and training through Lemco Academy, ensuring hotels and integrators have access to the knowledge and resources they need to maximize the benefits of Fleex Prime.



Live TV / Radio

Experience endless entertainment possibilities with a state-of-the-art player for Live TV and Radio. Access a vast selection of global channels and stations, with exceptional video resolutions of up to 4K, ensuring top-notch streaming quality and compatibility with a range of devices. The intuitive interface and advanced search options make finding favorite programs easier. From catching up on the latest news to listening to favorite radio station, the player delivers a seamless and personalized viewing experience.

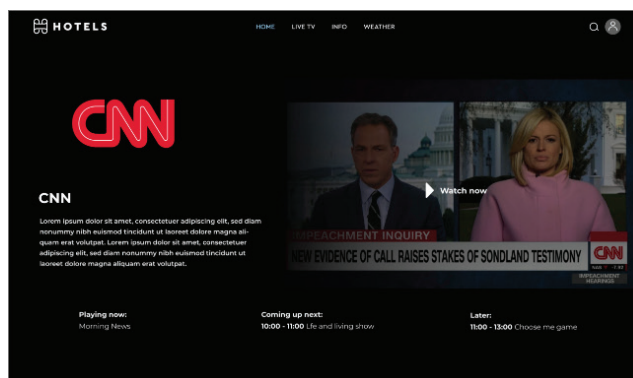


Pay TV

Fleex IPTV middleware offers guests access to premium pay-per-view channels and movies, providing an exclusive entertainment experience right in the comfort of their own room. Guests can browse a wide selection of new releases and popular titles, from the latest blockbuster movies to popular TV shows.

Video on demand

Fleex IPTV middleware's Video On Demand (VOD) feature is not only a vast selection of movies and TV shows, but it also provides guests with valuable information about each title. With the integration of IMDb, guests can access information such as ratings, reviews, and cast lists for each movie or TV show available in the VOD library. This feature allows guests to make informed decisions about which titles to watch, ensuring a more satisfying entertainment experience. With Fleex IPTV middleware's VOD feature, guests can enjoy their favorite content with the convenience of IMDb information, making their stay even more enjoyable and memorable.



Up to 8000 ready off-the-shelf logos!

Enhance your viewing experience with Fleex's impressive internal logo library, containing up to 8000 off-the-shelf logos from the most well-known TV providers worldwide. Choose your preferred logo icon for TV programs effortlessly, adding a personalized touch to your viewing preferences. Fleex's extensive library ensures that you can easily navigate and access your favorite channels, with a wide range of logo options available.

Search a logo in our database:

✓ Ant1 logo is available



EPG Support

Experience the convenience of Fleex's Electronic Program Guide (EPG) engine, displaying all the available information received from any live TV or radio channel in real-time. Stay informed with current and upcoming programming, program descriptions, participating actors or singers, and any other related information specific to each program. Fleex's EPG feature provides an intuitive and user-friendly interface, allowing for easy navigation through channels and programs. Enhance your viewing experience with Fleex's advanced EPG engine, providing you with up-to-date information and real-time program updates.



Over 120 PMS supported

This feature allows you to integrate your PMS with Fleex Prime to offer personalized information, such as room charges and checkout time, directly on your guests' in-room TV. By enabling this feature, you can automate different aspects of your property to create a personalized guest experience, such as providing room service ordering and booking amenities through Fleex Prime.



Customize everything with Canvas

Experience endless entertainment possibilities with a state-of-the-art player for Live TV and Radio. Access a vast selection of global channels and stations, with exceptional video resolutions of up to 4K, ensuring top-notch streaming quality and compatibility with a range of devices. The intuitive interface and advanced search options make finding favorite programs easier.



Digital Signage

Make a lasting impression on your guests and increase revenue with Fleex Prime's built-in digital signage feature. Display targeted and engaging content such as promotions, events, and news, and provide your guests with important information to enhance their experience at your hotel.



Ordering

Offer a convenient and contactless way to order food and beverage by using Fleex IPTV middleware's Ordering feature. Enable your guests to place orders directly from their in-room TV, enhancing their experience while promoting your hotel's services.



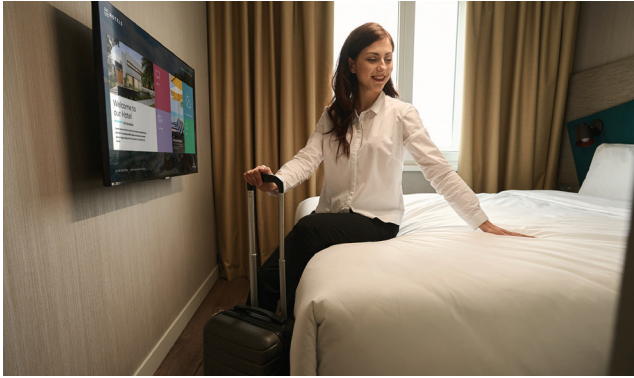
Welcome

Welcome your visitors with a personalized experience using Fleex IPTV middleware's "Welcome" feature. This powerful tool allows hotels to create custom welcome messages, videos, or photos that set the tone for the guest's stay.



Ordering

Improve your guest experience by using Fleex IPTV middleware's Questionnaires feature to gather valuable feedback. Create custom questionnaires to gain insight into what guests like and dislike and make informed decisions to improve your services.



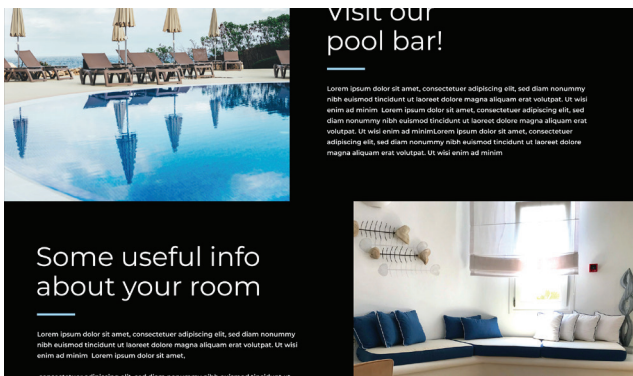
Housekeeping

Streamline your hotel's housekeeping operations and provide your guests with a more efficient and comfortable stay using Fleex IPTV middleware's Housekeeping feature. The feature allows your housekeeping staff to manage the status of rooms, create cleaning schedules, and prioritize tasks using a centralized and easy-to-use platform. With Fleex IPTV middleware's Housekeeping feature, you can improve your hotel's efficiency and offer your guests a more comfortable and seamless stay.



Advertisements

Generate revenue for your hotel and promote your services using Fleex IPTV middleware's Advertisements feature. This feature allows you to display targeted advertisements on your in-room TV, providing a valuable marketing opportunity for local businesses while creating an additional revenue stream for your hotel.



Points of Interest (POI)

Enhance your guests' experience and promote local attractions and events using Fleex IPTV middleware's Points of Interest (POI) feature. This feature allows you to create customized lists of nearby points of interest, including restaurants, shops, tourist attractions, and more, giving your guests easy access to valuable information about the local area.



Mobile guest app

Enhance your guests' experience and provide them with convenient access to hotel services using Fleex IPTV middleware's Guest Mobile App feature. This feature allows your guests to use their mobile devices to access various hotel services, including room service, housekeeping, watch Live TV over local Wifi and more.





Enjoy all Fleex Prime's features also including:

• BMS integration	• Media Library	• Quick request
• Emergency	• Customers	• e-Forms
• Analytics	• Multi-corporate	• Weather & time / date
• Plane / Train Itineraries	• Messages	• Cloud or Local option





Introducing Fleex Embedded, the innovative solution for hotels aiming to provide their guests with a seamless and engaging experience. Our state-of-the-art platform allows you to create up to 10 customizable information pages to showcase your hotel's facilities, terms and conditions, WiFi credentials, and more. Enhance your guests' stay with visually stunning Full HD images and tailored content in multiple languages, ensuring a personalized touch for every visitor. Upgrade your hotel's communication and promotional efforts with Fleex Embedded, and watch your guest satisfaction soar!

Why Fleex Embedded?



Enhances the guest experience with interactive TV features, information and multilingual support



Features an intuitive, user-friendly interface that is easy for both hotel staff and guests to use, saving time and resources on training and support while enhancing the overall guest experience.



Operates directly from the Lemco headend, without the need for any external server, providing a simple and efficient solution for hotels to manage their TV and other systems.



Supports leading hotel IPTV brands (LG, Samsung, Philips) and external set-top boxes for hardware flexibility



Provides an affordable and transparent pricing model with one-time fee licenses



Provides free continuous updates to ensure hotels have access to the latest features and improvements without any additional costs, helping hotels enhance their guests' experience with new features and improvements.



Provides excellent support and training through Lemco Academy, helping hotels and integrators maximize the benefits of Fleex Embedded and ensuring a seamless guest experience.

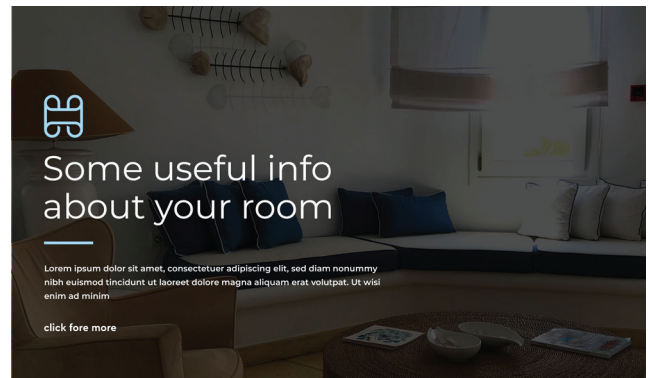
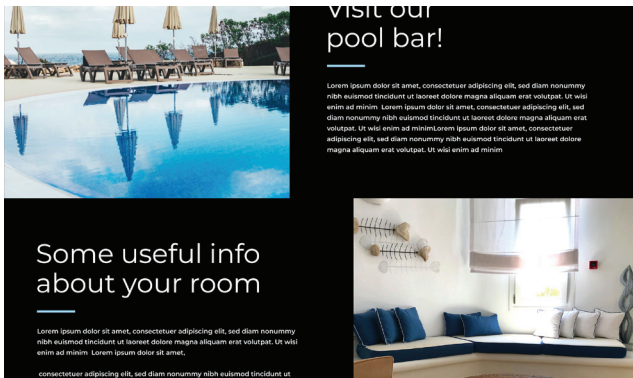


Offers a scalable solution for hotels of all sizes, supporting up to 500 TVs



Live TV / Radio

Experience endless entertainment possibilities with a state-of-the-art player for Live TV and Radio. Access a vast selection of global channels and stations, with exceptional video resolutions of up to 4K, ensuring top-notch streaming quality and compatibility with a range of devices. The intuitive interface and advanced search options make finding favorite programs easier. From catching up on the latest news to listening to favorite radio station, the player delivers a seamless and personalized viewing experience.

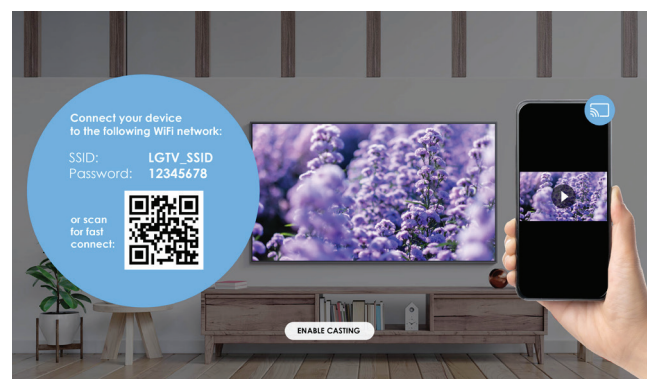


Up to 10 Info pages

Customize your info pages with relevant content and information, such as hotel services and facilities, promotions, local attractions, and more. Fleex Embedded's info pages provide a seamless and personalized experience, allowing you to tailor your viewing preferences to your needs. Enjoy easy navigation through channels and programs, with the option to access relevant information at your fingertips.

Unlimited languages

Experience the convenience of unlimited language support with Fleex. Whether you prefer to browse in your native language or need to access content in multiple languages, Fleex's unlimited language support ensures that you can enjoy your viewing experience in your preferred language. With a vast selection of languages to choose from, Fleex makes it easy to access content in multiple languages, providing a seamless and personalized viewing experience for all users. Enjoy easy navigation through channels and programs, with the option to access content in the language of your choice.



Up to 8000 ready off-the-self logos!

Enhance your viewing experience with Fleex's impressive internal logo library, containing up to 8000 off-the-shelf logos from the most well-known TV providers worldwide. Choose your preferred logo icon for TV programs effortlessly, adding a personalized touch to your viewing preferences. Fleex's extensive library ensures that you can easily navigate and access your favorite channels, with a wide range of logo options available.

Search a logo in our database:

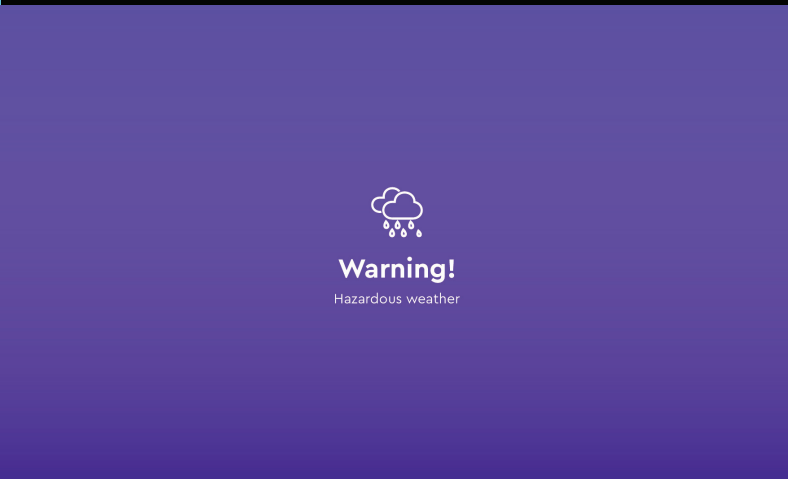
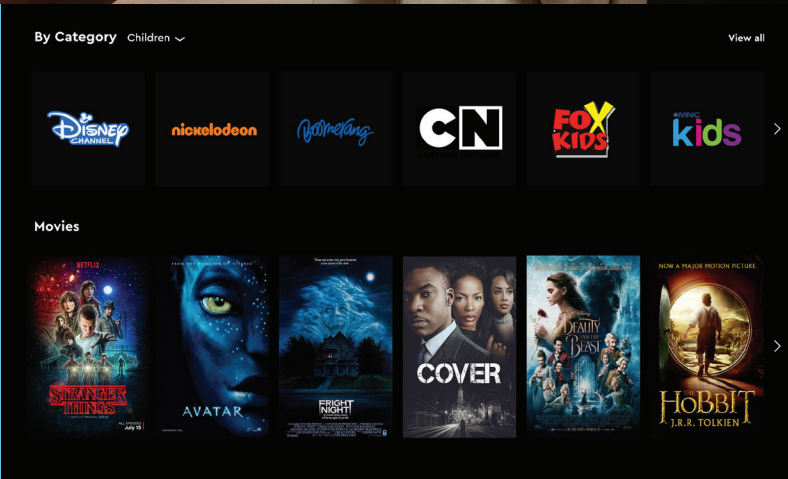
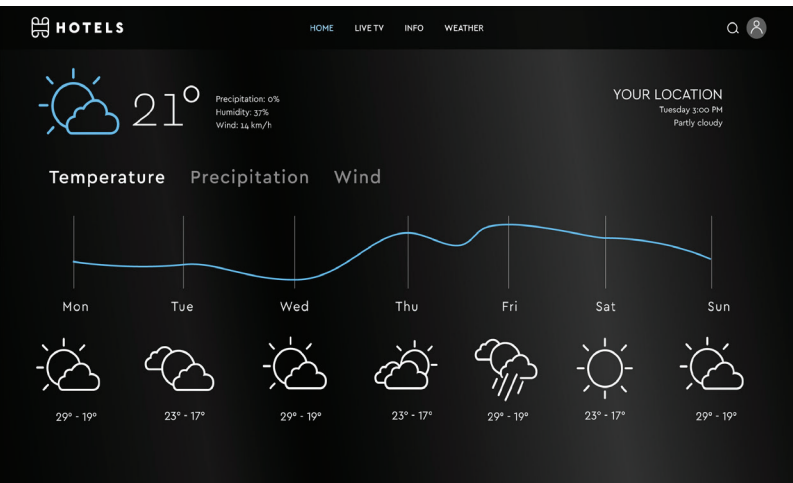


✓ Ant1 logo is available



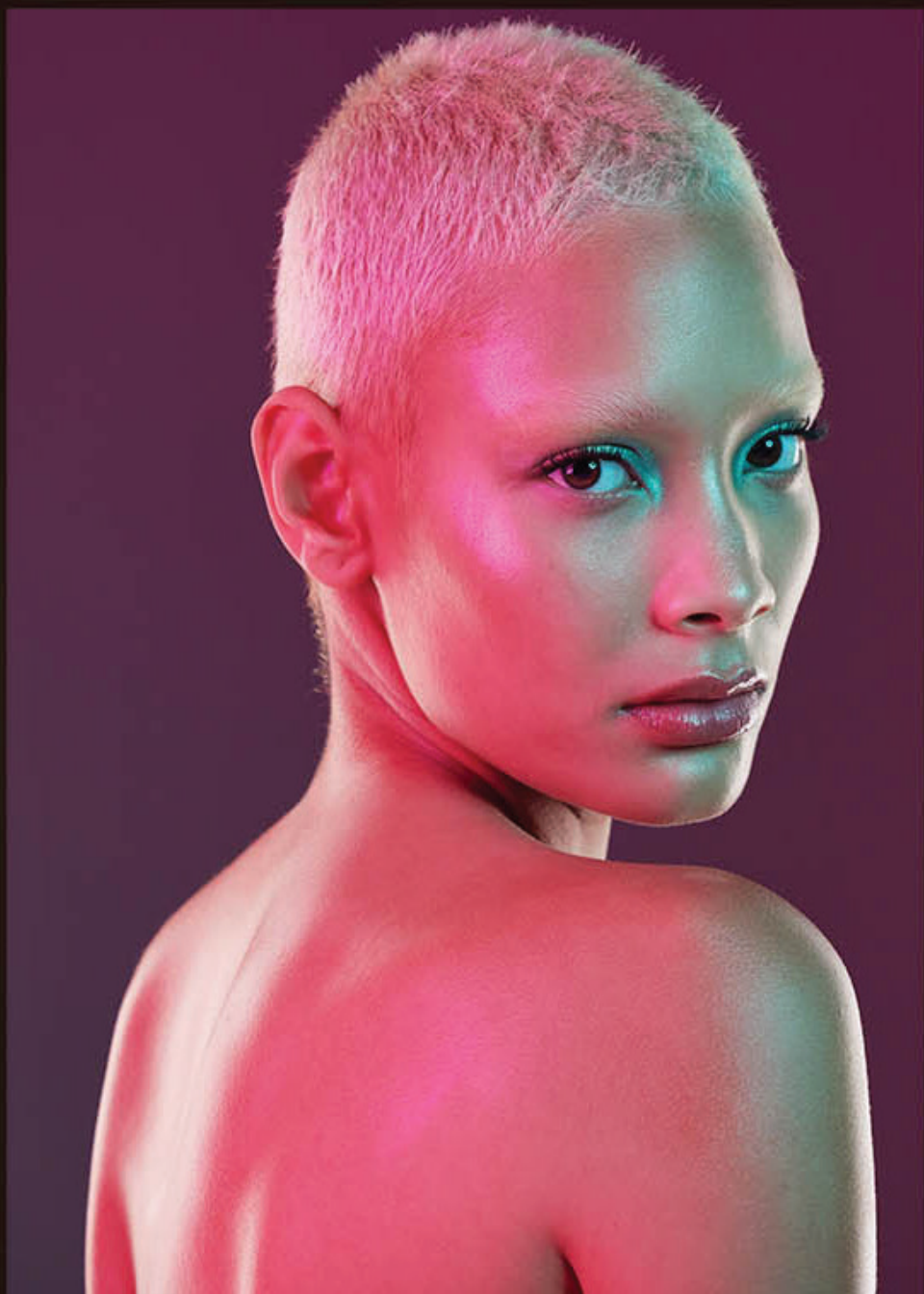
Cast

Experience endless entertainment possibilities with Fleex's advanced cast feature. Connect all your mobile devices, including Android smartphones and tablets, iPhones, iPads, and laptops, using wireless technology to share your screen on any TV monitor. With Fleex's cast feature, you can easily cast movies, TV shows, photos, entire websites, or tabs from a Chrome browser on various devices, such as Windows computers, Macs, Chromebooks, and more. Enjoy personalized and convenient viewing, with the option to access popular streaming apps such as Netflix, Spotify, Disney+, Amazon Prime, and Apple TV, among others, directly from your TV monitor. With Fleex's advanced cast feature, the entertainment possibilities are endless.



Enjoy all Fleex Embedded's features
also including:

• EPG Support	• Weather	• Time / Date info
• Alarm	• No need of external server	





Experience the power of Fleex Digital Signage (DS), a versatile software solution designed to promote and enhance your products and services. With Fleex DS, you can create dynamic and engaging content that captures the attention of your audience and communicates your message effectively. Whether you're looking to promote special offers, display product information, or provide wayfinding directions, Fleex DS provides a comprehensive and intuitive platform to meet your needs. With easy content management and distribution, Fleex DS can seamlessly integrate with your existing hardware and software, providing a hassle-free solution for all your digital signage needs. With Fleex DS, take your business to the next level with engaging and impactful digital signage.

Why Fleex DS?



Create dynamic and engaging content to capture the attention of your audience



Promote your products and services effectively with Fleex DS



Enjoy a versatile platform that can meet a range of digital signage needs even the most sophisticated scenario



Effortlessly manage and distribute content with Fleex DS's intuitive interface



Cloud interface for access from everywhere



Take your business to the next level with impactful digital signage



No tech skills required

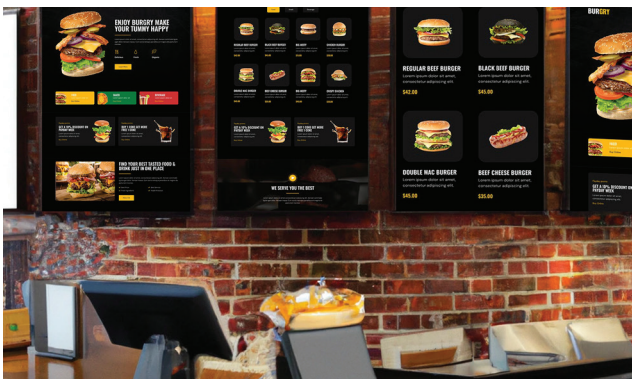


Easy to manage and schedule



Lots of possibilities and options

Experience the unlimited possibilities and options of Fleex DS. With advanced customization tools and a wide range of features, you can create digital signage that truly reflects your brand and messaging. From dynamic video walls to interactive touchscreens, Fleex DS provides the tools you need to engage your audience and deliver impactful messaging.



Very friendly interface

Enjoy the simplicity and flexibility of Fleex DS's user-friendly interface. With intuitive controls and easy-to-use scheduling tools, you can manage your digital signage with ease. Whether you're updating your messaging or scheduling content in advance, Fleex DS's interface makes the process seamless and stress-free.

Works on any screen

Display your content on any screen with Fleex DS's versatile compatibility. Whether you're using a large-format display or a small-screen device, Fleex DS provides the flexibility to adapt to your needs. With support for a wide range of media formats and display options, Fleex DS is the ultimate solution for any digital signage installation.



Easy scheduling

Schedule your content with ease using Fleex DS's intuitive scheduling tools. With advanced scheduling options, you can create a customized content calendar that reflects your specific messaging needs. From single displays to multiple locations, Fleex DS provides the tools you need to manage your digital signage with ease.

Cloud based

Enjoy the ultimate convenience and security of Fleex DS's cloud-based infrastructure. With Microsoft Azure hosting, Fleex DS provides top-of-the-line security and performance for your digital signage needs. From advanced encryption to real-time monitoring, Fleex DS's cloud-based solution provides a hassle-free solution for all your digital signage needs.

 **FLEEX**
DS







Fleex Streamer is the perfect solution for seamless real-time streaming of video and audio content in various formats and protocols. With its ability to transmux, transrate, transize, and transcode, it offers unparalleled flexibility in converting video and audio streams in real-time. Its support for a wide range of protocols, including UDP, RTP, RTMP, RTSP, RTCP, WebRTC, HLS, LHLS, MPEG-DASH, FLV, SRT, and HTTP, means that you can stream your content over any network, no matter the conditions.

Fleex Streamer supports all major video and audio codecs, including MPEG-2, MPEG-4, H.264/AVC, HEVC/H.265, VP8, VP9, AAC, AC-3, MP3, and NDI, making it the perfect tool for delivering high-quality, high-definition content to your audience. Its ability to work with a variety of containers, including .mp4, .mkv, .mov, .avi, .ts, .m2ts, and .flv, ensures that your content is easily accessible and compatible with any device.

Whether you're a hotel, a hospital, an airport, or any business that relies on real-time streaming of video and audio content, Fleex Streamer is the ultimate solution for your needs. With its advanced capabilities and support for a wide range of protocols and codecs, it offers unparalleled flexibility, reliability, and performance that will exceed your expectations.

Why Fleex Streamer?



Transmuxing (Change the container using the same format)



Transrate (Change the bitrate using the same format)



Transize (Change the resolution using the same format)



Transcode (change the codec)

Input protocols

Fleex streamer is able to receive and support the following protocols:

- UDP (MPEG-TS)
- RTP
- RTMP
- RTSP
- RTCP
- WebRTC
- HLS
- LHLS
- Mpeg-DASH
- FLV
- SRT
- HTTP
- Local file

Transcoder - Supported CODECS

Fleex streamer is able to do real-time transcoding using Nvidia GPU (Cuda cores) supporting the following:

- | | |
|---------------|---------|
| Video | Audio |
| • Mpeg2 | • Mpeg2 |
| • H.264/AVC | • AAC |
| • HEVC/H.265 | • AC-3 |
| • VP8 and VP9 | • Mp3 |
| | • NDI |

Containers

Fleex streamer supports the following containers:

- | | |
|------|-------|
| .mp4 | .ts |
| .mkv | .m2ts |
| .mov | .flv |
| .avi | |

Output protocols

Fleex streamer is able to convert any stream at the following protocols:

- | | |
|-----------------|--------------|
| • UDP (MPEG-TS) | • LHLS |
| • RTP | • Mpeg-DASH |
| • RTMP | • FLV |
| • RTSP | • SRT |
| • RTCP | • HTTP |
| • WebRTC | • Local file |
| • HLS | |

NVIDIA Cuda cores

Fleex Streamer leverages the powerful performance of Nvidia CUDA cores for lightning-fast real-time transcoding of video and audio streams. This advanced technology allows for seamless conversion of various video and audio formats, ensuring smooth delivery of content to viewers across multiple platforms. With Fleex Streamer and Nvidia CUDA cores, you can enjoy high-quality video streaming with reduced latency and improved overall performance.



Multiple Outputs

Fleex Streamer is an advanced real-time application developed by Lemco that allows for the simultaneous reception of a single streams and its conversion to multiple output formats in real-time. With the ability to transmux, transrate, transcode, and transize, this powerful software can change the container, bitrate, resolution, and codec of a stream to ensure compatibility with a wide range of devices and platforms.



11:20	COPENHAGEN	IBS
11:25	Compartido: IBE 3906	
11:25	FUERTEVENTURA	IBS
11:25	Compartido: IBE 3906	
11:25	P.MALLORCA	IBS
11:30	Compartido: QR 6997	
11:30	SPLIT	IBS

Preséntese al embarque a la hora indicada
No se emitirán mensajes



Salidas

Time To

12:10 BOGOTA
Code shared: LA 7112

12:10 HAMBURGO
Code shared: AB 5337

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