



# Product Catalogue 2022

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Leading the signal all  
over the world



[www.lemco.gr](http://www.lemco.gr)





LEMCO

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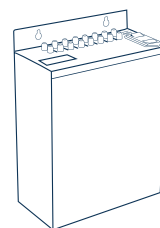
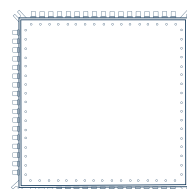
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# About LEMCO

## Who we are

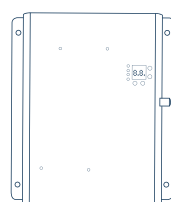
Lemco has over 40 years of experience in designing and manufacturing TV signal broadcast equipment. Renowned for its high standards of quality and wide range of innovative products, it has become established as one of the leading companies in the Greek and European markets. It offers integrated solutions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



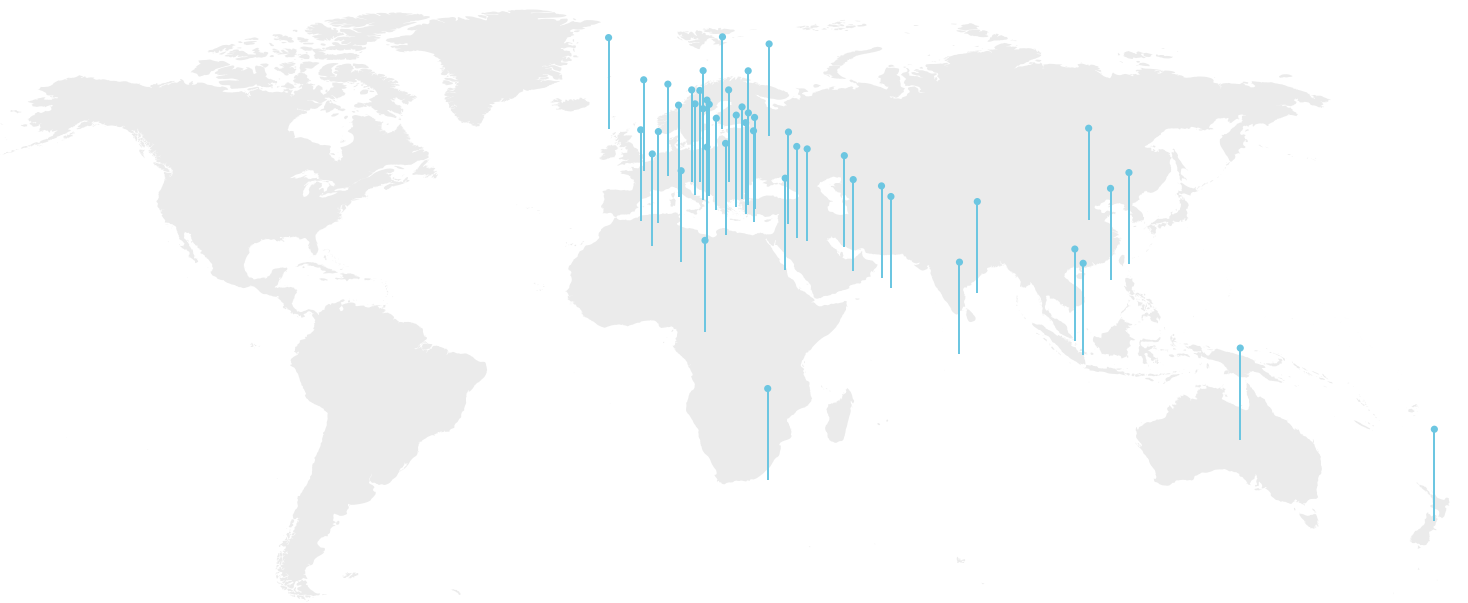
## Human Resources

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         | CZECH REPUBLIC | ALBANIA      | FYROM     |
| HOLLAND        | IRELAND        | MOROCCO      | INDIA     |
| SPAIN          | LITHUANIA      | SAUDI ARABIA | MALAYSIA  |
| POLAND         | SLOVAKIA       | ICELAND      | TUNISIA   |
| BELGIUM        | FINLAND        | AUSTRALIA    | NIGERIA   |
| MALTA          | AUSTRIA        | SWITZERLAND  | IRAQ      |
| FRANCE         | PORTUGAL       | EGYPT        | ALGERIA   |
| ITALY          | CROATIA        | SINGAPORE    | VIETNAM   |
| CYPRUS         | HUNGARY        | S. AFRICA    | NORWAY    |
| GERMANY        | TURKEY         | LEBANON      | CHINA     |
| DENMARK        | U.A.E.         | MALDIVES     | HONG KONG |
| UNITED KINGDOM | OMAN           | NEW ZEALAND  |           |



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.



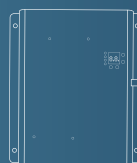
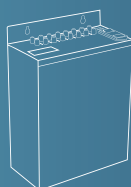
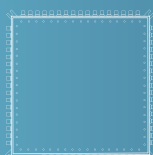
## DVB-S2X

**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:



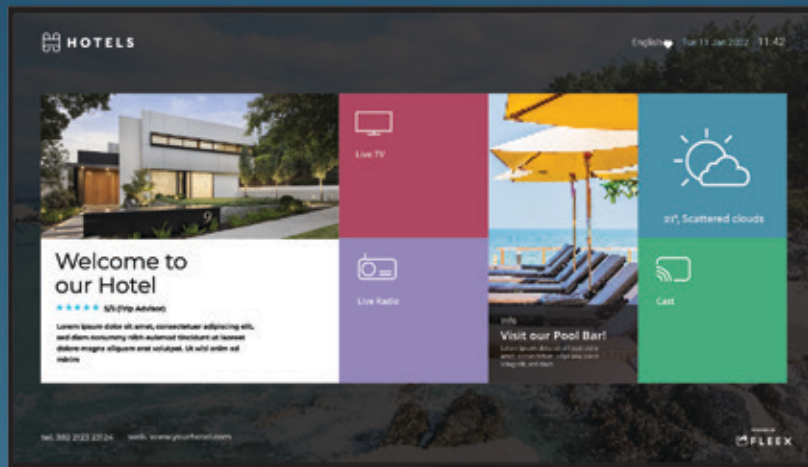
# HEADENDS

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**Compact Line 2 · Micro Line**



TV just got better...



The most **integrated solution**  
for hospitality TV

An new product by LEMCO

## COMPACT LINE 2

One of the most compact headend solutions worldwide, covering all standards (DVB-S/S2/S2X/T/T2/C) able to deliver the signal over DVB-T/C and IP at the same time. Moreover, Compact Line 2 units are able to host Fleex Embedded, one of the most state-of-the-art IPTV middleware in the industry, without the need of an external server.



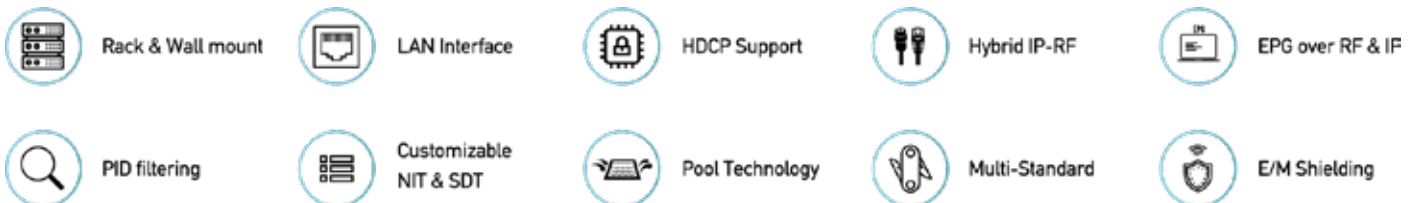
# SCL-824CT

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



## Features

- 8 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 > 40dB
- PID Filtering
- Custom NIT/SDT
- Linux OS
- Fleex embedded Support
- Very friendly user interface
- Wall or rack mountable
- Compact size
- SNMP v2 support
- 5year warranty



The new SCL-824CT headend from Compact Line 2 series is a very powerful, all-in-one device, able to receive up to 8x independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4x DVB-T/C RF output channels while offering 1x Gbit IPTV streaming simultaneously. It supports "pool" technology, meaning that the user is able to select any program from any of the 8x inputs and assign it to any of the 4x RF + IP outputs providing great flexibility.

A powerful CPU (Quad core @ 1.8GHz / 2GB RAM) is responsible for controlling the device using Linux OS while providing a friendly and very fast user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and powerful features render the SCL-824CT the ideal solution in the cases that 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 and IP technology.

Finally, the SCL-824CT is able to host an IPTV middleware (Fleex Embedded), without the need of any external server, providing the capability to the final user to control all TV monitors in an installation (LG, Samsung, Philips and custom STBs supported) while offering a variety of different features like Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG and many more...



**TECHNICAL SPECIFICATIONS**

**Input Specifications**

<b>Input</b>		
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	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	
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<b>DVB-T</b>		
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	

<b>DVB-T2 / T2 Lite</b>		
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	

<b>ITU-T J.83</b>		
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**

<b>DVB-T</b>		
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	

<b>ITU-T J.83</b>		
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**

Operating system	Linux
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

**General**

Power Supply	108 to 240 VAC 50/60Hz
Power supply consumption	55 VA max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.50 x 106 mm
Weight	1.7 Kg



# SCL-834CT

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



## Features

- 8 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream reception 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 > 40dB
- PID Filtering
- Custom NIT/SDT
- Linux OS
- Fleex embedded Support
- Very friendly user interface
- Wall or rack mountable
- Compact size
- SNMP v2 support
- 5year warranty



The new SCL-834CT headend from Compact Line 2 series is a very powerful, all-in-one device, able to receive up to 8x independent satellite (DVB-S/S2/S2X) signals with multi-stream support and convert them in 4x DVB-T/C RF output channels while offering 1x Gbit IPTV streaming simultaneously. It supports "pool" technology, meaning that the user is able to select any program from any of the 8x inputs and assign it to any of the 4x RF + IP outputs providing great flexibility.

A powerful CPU (Quad core @ 1.8GHz / 2GB RAM) is responsible for controlling the device using Linux OS while providing a friendly and very fast user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and powerful features render the SCL-834CT the ideal solution in the cases that we want to distribute FTA (Free-To-Air) TV programs coming from satellite (DVB-S/S2/S2X) sources with multi-stream support to a CATV installation using the DVB-T/C and IP technology.

Finally, the SCL-834CT is able to host an IPTV middleware (Fleex Embedded), without the need of any external server, providing the capability to the final user to control all TV monitors in an installation (LG, Samsung, Philips and custom STBs supported) while offering a variety of different features like Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG and many more...

**TECHNICAL SPECIFICATIONS**

**Input**

Type	8 x DVB-S/S2/S2X
Frequencies	950...2150 MHz
Multi-stream support	Yes
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	Any 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**

Operating system	Linux
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

**General**

Power Supply	108 to 240 VAC 50/60Hz
Power supply consumption	55 VA max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.50 x 106 mm
Weight	1.7 Kg



EAN: 5213009761307

# SCL-424CT

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



### Features

- 4 x independent multi-standard inputs DVB-S/S2/T/T2/C
- 4x FlexCAM (CIs can be connected at the inputs or outputs)
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 40dB
- PID Filtering
- Custom NIT/SDT
- Linux OS
- Fleex embedded Support
- Very friendly user interface
- Wall or rack mountable
- Compact size
- SNMP v2 support
- 5year warranty



Rack & Wall mount



LAN Interface



HDCP Support



Hybrid IP-RF



EPG over RF & IF



PID filtering



Customizable  
NIT & SDT



Pool Technology



Multi-Standard



E/M Shielding

The new SCL-424CT headend from Compact Line 2 series is a very powerful, all-in-one device, able to receive up to 4x independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4x DVB-T/C RF output channels while offering 1x Gbit IPTV streaming simultaneously. The SCL-424CT supports 4x CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module) as well as it supports "pool" technology, meaning that the user is able to select any program from any of the 4x inputs and assign it to any of the 4x RF + IP outputs providing great flexibility.

A powerful CPU (Quad core @ 1.8GHz / 2GB RAM) is responsible for controlling the device using Linux OS while providing a friendly and very fast user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and powerful features render the SCL-424CT the ideal solution in the cases that 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 and IP technology.

Finally, the SCL-424CT is able to host an IPTV middleware (Fleex Embedded), without the need of any external server, providing the capability to the final user to control all TV monitors in an installation (LG, Samsung, Philips and custom STBs supported) while offering a variety of different features like Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG and many more...

**TECHNICAL SPECIFICATIONS**

**Input Specifications**

<b>Input</b>		
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	
CI Interfaces:	4x PCMCIA	
	Each CI can be connected at the input or output via software	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	

<b>DVB-T</b>		
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	

<b>DVB-T2 / T2 Lite</b>		
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	

<b>ITU-T J.83</b>		
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**

<b>DVB-T</b>		
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**

Operating system	Linux
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)

**General**

Power Supply	108 to 240 VAC 50/60Hz
Power supply consumption	55 VA max.

Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.50 x 106 mm
Weight	1.7 Kg



# SCL-434CT

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



### Features

- 4 x independent multi-standard inputs DVB-S/S2/S2X
- Multi-stream reception support
- 4x FlexCAM (CIs can be connected at the inputs or outputs)
- 4 x RF output DVB-T/C (software selectable)
- Gbit IP streaming (up to 64 x SPTS / 4 x MPTS)
- "Pool" technology
- MER value > 40dB
- PID Filtering
- Custom NIT/SDT
- Linux OS
- Fleex embedded Support
- Very friendly user interface
- Wall or rack mountable
- Compact size
- SNMP v2 support
- 5year warranty



The new SCL-434CT headend from Compact Line 2 series is a very powerful, all-in-one device, able to receive up to 4x independent satellite (DVB-S/S2) signals with multi-stream support and convert them in 4x DVB-T/C RF output channels while offering 1x Gbit IPTV streaming simultaneously. The SCL-434CT supports 4x CI interfaces, using FlexCAM technology, to be able to descramble any TV content by using the appropriate CAM (Conditional Access Module) as well as it supports "pool" technology, meaning that the user is able to select any program from any of the 4x inputs and assign it to any of the 4x RF + IP outputs providing great flexibility.

A powerful CPU (Quad core @ 1.8GHz / 2GB RAM) is responsible for controlling the device using Linux OS while providing a friendly and very fast user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and powerful features render the SCL-434CT the ideal solution in the cases that we want to distribute FTA (Free-To-Air) TV programs coming from satellite (DVB-S/S2/S2X) sources with multi-stream support to a CATV installation using the DVB-T/C and IP technology.

Finally, the SCL-434CT is able to host an IPTV middleware (Fleex Embedded), without the need of any external server, providing the capability to the final user to control all TV monitors in an installation (LG, Samsung, Philips and custom STBs supported) while offering a variety of different features like Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG and many more...

**TECHNICAL SPECIFICATIONS**

**Input Specifications**

<b>Input</b>		
Type	4 x DVB-S/S2/S2X	
Frequencies	950...2150 MHz	DVB-S/S2
	118...900MHz	DVB-T/T2/C
Multi-stream support	Yes	
Connector	75Ω - F, female	
CI Interfaces:	4x PCMCIA	
	Each CI can be connected at the input or output via software	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	

<b>DVB-S2X</b>		
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**

<b>DVB-T</b>		
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	

<b>ITU-T J.83</b>		
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 names	User selection by service
Automatic Regeneration tables	PAT, CAT, SDT, PMTs, EITs
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**

Operating system	Linux
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45
Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc. (Must support HTML v5.0)

**General**

Power Supply	108 to 240 VAC 50/60Hz
Power supply consumption	55 VA max.

Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.50 x 106 mm
Weight	1.7 Kg



# HCL-824CT

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



## Features

- 8 x HDMI inputs
- Full HD H.264 encoding
- 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 > 40dB
- Custom NIT/SDT
- Linux OS
- Fleex embedded Support
- Very friendly user interface
- Wall or rack mountable
- Compact size
- SNMP v2 support
- 5year warranty



The new HCL-824CT headend from Compact Line 2 series is a very powerful, all-in-one device, able to receive up to 8x HDMI signals and convert them in 4x DVB-T/C RF output channels while offering 1x Gbit IPTV streaming simultaneously. It supports "pool" technology, meaning that the user is able to select any program from any of the 8x inputs and assign it to any of the 4x RF + IP outputs providing great flexibility.

A powerful CPU (Quad core @ 1.8GHz / 2GB RAM) is responsible for controlling the device using Linux OS while providing a friendly and very fast user interface as well as the ability of remote or local control of the device via Ethernet.

Its small size and powerful features render the HCL-824CT the ideal solution in the cases that we want to distribute HDMI content eg. coming from STBs or blue ray sources to a CATV installation using the DVB-T/C and IP technology.

Finally, the HCL-824CT is able to host an IPTV middleware (Fleex Embedded), without the need of any external server, providing the capability to the final user to control all TV monitors in an installation (LG, Samsung, Philips and custom STBs supported) while offering a variety of different features like Live TV, Live Radio, Info channels, Cast, Weather, Alarm, EPG and many more...



**TECHNICAL SPECIFICATIONS**

**Input Specifications**

<b>Input</b>	
Type	8 x HDMI 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

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

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

**Output Specifications**

<b>DVB-T</b>	
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

<b>ITU-T J.83</b>	
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

<b>RF Output</b>	
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**

Operating system	Linux
Ethernet webserver	Yes, embedded webserver
Speed	100/1000 Mbps
Connector	RJ45

Browser compatibility	Chrome, Firefox, Safari, Opera, Edge etc.(Must support HTML v5.0)
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**General**

Power Supply	108 to 240 VAC 50/60Hz
Power supply consumption	55 VA max.
Operating Temperature	0 °C to 40 °C
Storage Temperature	-10 °C to +70 °C
Humidity	Up to 90%
Dimensions	296.2 x 204.50 x 106 mm
Weight	1.7 Kg



**5** years  
**warranty**



**LEMCO**

[www.lemco.gr](http://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

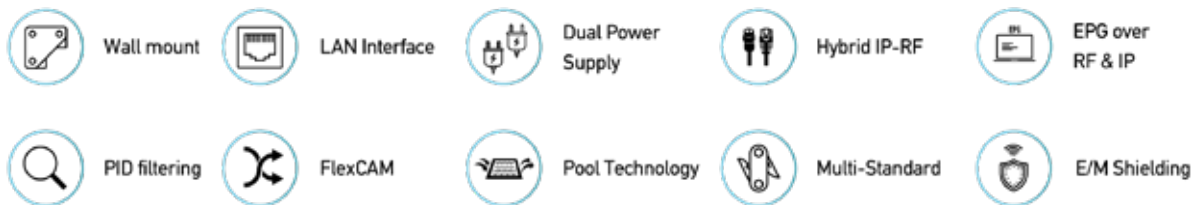
The MLF-100 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in four (4) x DVB-T/C RF output channels. It supports "pool" technology, meaning that the user is able to select any program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

<b>Input</b>		
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	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	

<b>DVB-T</b>		
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	

<b>DVB-T2 / T2 Lite</b>		
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	

<b>ITU-T J.83</b>		
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

<b>DVB-T</b>		
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	

<b>ITU-T J.83</b>		
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	

<b>RF Output</b>		
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	

<b>Transport Stream Processing</b>		
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	

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

<b>EAN-13</b>		
Code	5213009760102	

<b>General</b>		
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

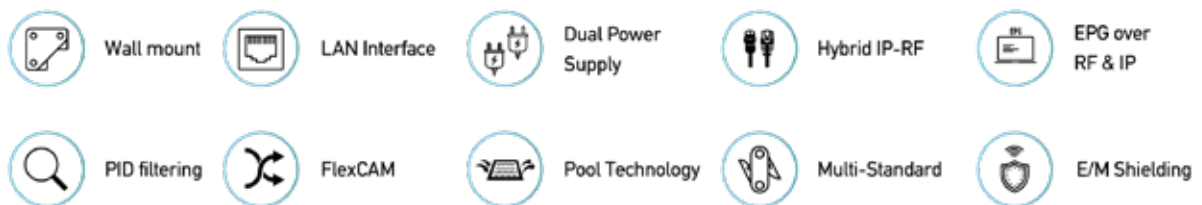
## 4 x DVB-S/S2/S2X to 4 x DVB-T/C

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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>DVB-T</b>	
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

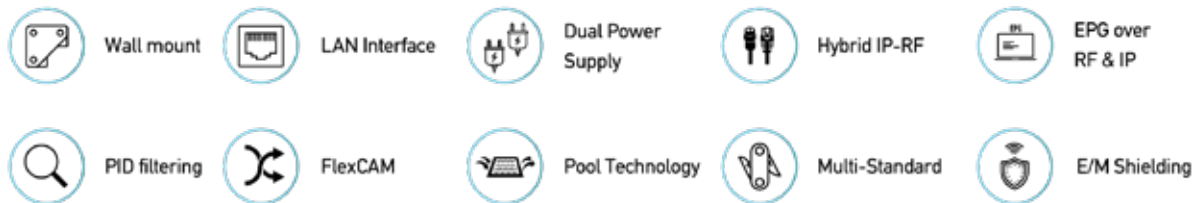
The MLF-200 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. Moreover, it supports "pool" technology, meaning that the user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

<b>Input</b>		
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	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	

<b>DVB-T</b>		
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	

<b>DVB-T2 / T2 Lite</b>		
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

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

<b>IP Streaming</b>	
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)

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

<b>EAN-13</b>	
Code	5213009760164

<b>General</b>	
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

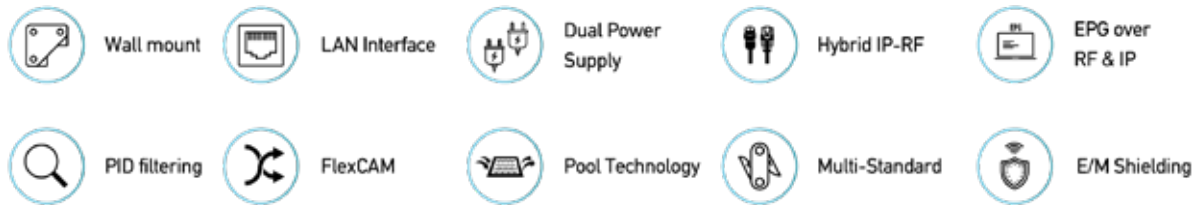
The MLF-201 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. Moreover, it supports "pool" technology, meaning that the user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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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, 9/10 (QPSK- automatic) 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (8PSK- automatic)

### Output Specifications

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

<b>IP Streaming</b>	
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)

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

<b>EAN-13</b>	
Code	5213009760171

<b>General</b>	
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

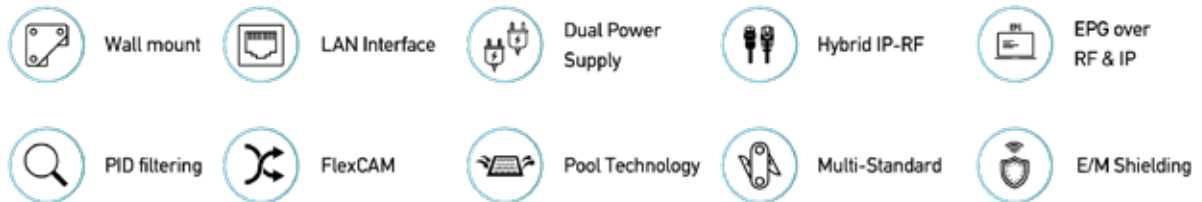
The MLF-300 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in four (4) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. It supports "pool" 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



### Input Specifications

<b>Input</b>		
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	

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-T</b>	
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

<b>DVB-T2 / T2 Lite</b>	
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

<b>ITU-T J.83</b>	
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

<b>DVB-T</b>	
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

<b>ITU-T J.83</b>	
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

<b>RF Output</b>	
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

<b>Transport Stream Processing</b>	
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

<b>IP Streaming</b>	
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)

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

<b>EAN-13</b>	
Code	5213009760225

<b>General</b>	
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

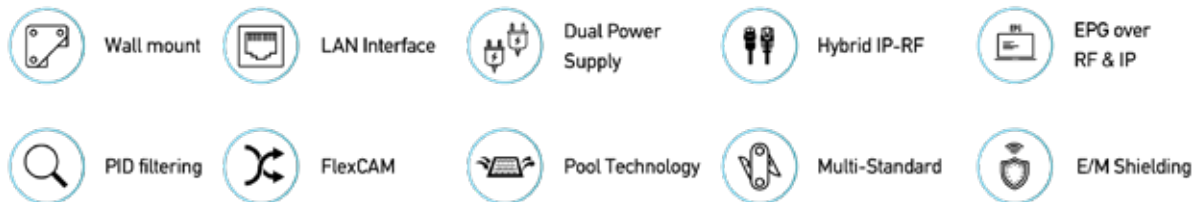
The MLF-301 is a very powerful, all-in-one device, able to receive up to four (4) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in four (4) x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. It supports "pool" 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



### Input Specifications

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>DVB-T</b>	
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

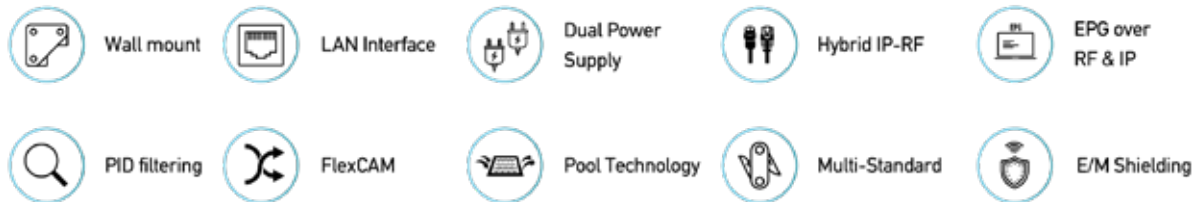
The MLC-100 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4 x DVB-T/C RF output channels. The MLC-100 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble 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

<b>Input</b>		
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	

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-T</b>	
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

<b>DVB-T2 / T2 Lite</b>	
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

<b>ITU-T J.83</b>	
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

<b>DVB-T</b>	
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

<b>ITU-T J.83</b>	
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

<b>RF Output</b>	
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

<b>Transport Stream Processing</b>	
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

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

<b>EAN-13</b>	
Code	5213009760089

<b>General</b>	
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

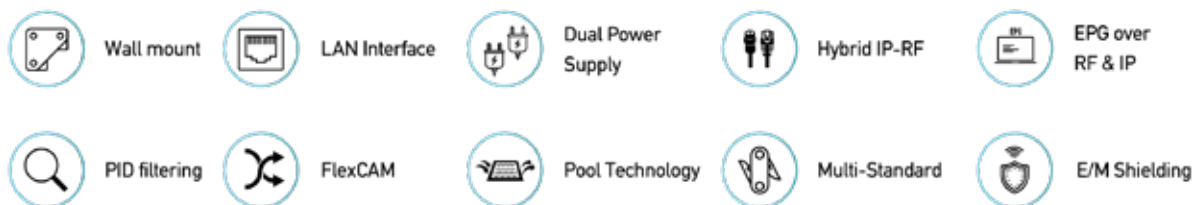
The MLC-101 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels. The MLC-101 supports two (2) CI interfaces, using FlexCAM technology, to be able to descramble 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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>DVB-T</b>	
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
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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-200

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

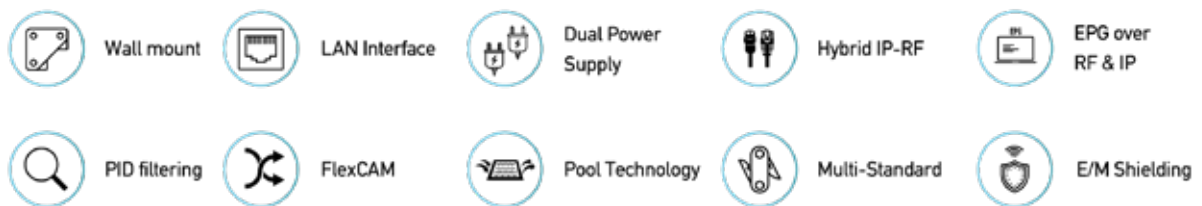
The MLC-200 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-200 supports two (2) CI interfaces, using FlexCAM technology, 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

<b>Input</b>		
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	

<b>LNB</b>		
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)	

<b>DVB-S</b>		
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)	

<b>DVB-S2</b>		
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)	

<b>DVB-T</b>		
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	

<b>DVB-T2 / T2 Lite</b>		
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

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

<b>IP Streaming</b>		
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.	

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

<b>EAN-13</b>		
Code	5213009760140	

<b>General</b>		
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.

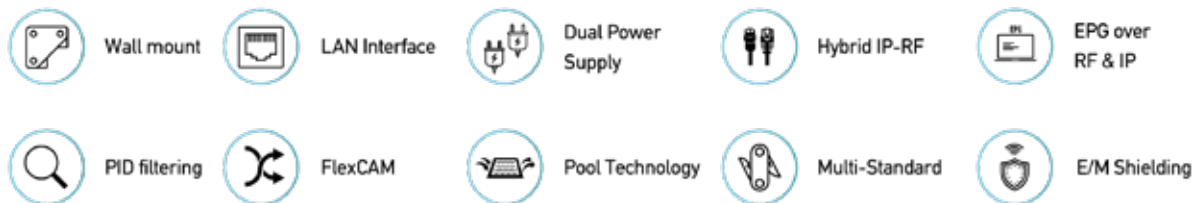
The embedded web server of the MLC-201 provides a very friendly user interface as well as the ability of remote or local control of the device via LAN.

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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>IP Streaming</b>	
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.

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

<b>EAN-13</b>	
Code	5213009760157

<b>General</b>	
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

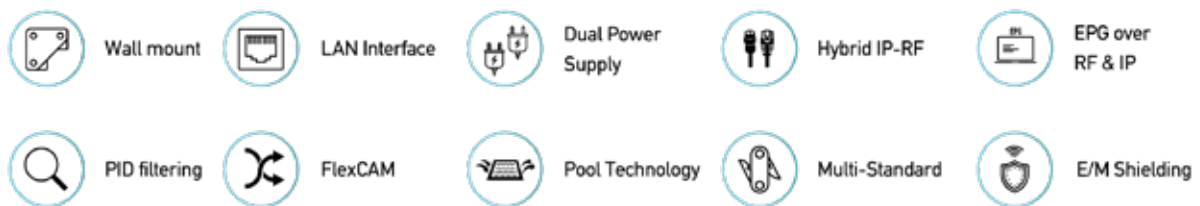
The MLC-300 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2), terrestrial (DVB-T/T2) or cable (DVB-C) signals and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-300 supports two (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





### Input Specifications

<b>Input</b>		
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	

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-T</b>	
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

<b>DVB-T2 / T2 Lite</b>	
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

<b>ITU-T J.83</b>	
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

<b>DVB-T</b>	
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

<b>ITU-T J.83</b>	
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

<b>RF Output</b>	
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

<b>Transport Stream Processing</b>	
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

<b>IP Streaming</b>	
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)

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

<b>EAN-13</b>	
Code	5213009760201

<b>General</b>	
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

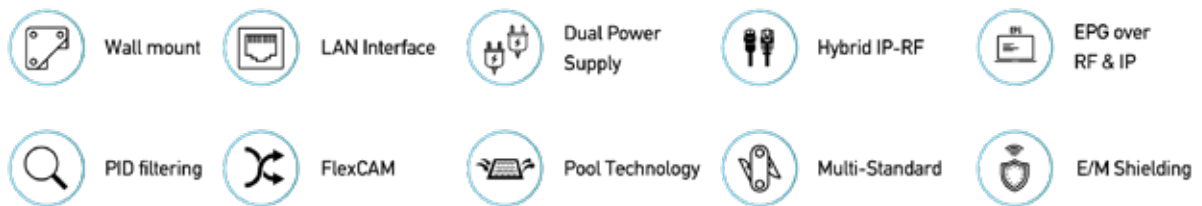
The MLC-301 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-301 supports two (2) 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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>DVB-T</b>	
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

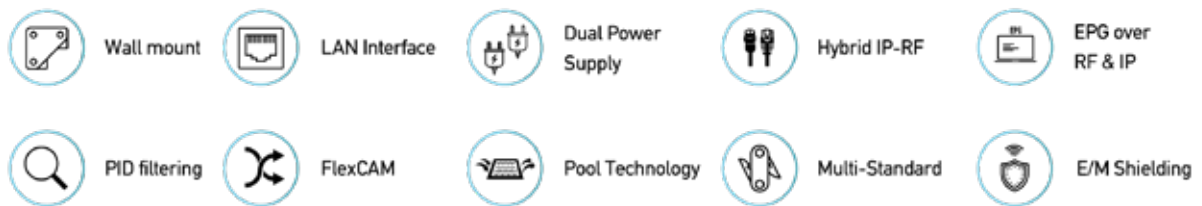
The MLC-301 is a very powerful, all-in-one device, able to receive up to two (2) independent satellite (DVB-S/S2/S2X) signals supporting multistream reception and convert them in 4 x DVB-T/C RF output channels or in IPTV streaming using UDP/RTP protocols multicast/unicast. The MLC-301 supports two (2) 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

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

<b>LNB</b>	
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)

<b>DVB-S</b>	
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)

<b>DVB-S2</b>	
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)

<b>DVB-S2X</b>	
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

<b>DVB-T</b>	
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.

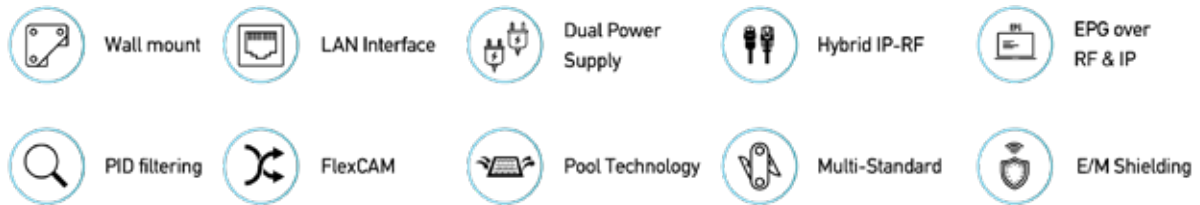
It supports "pool" technology, meaning that the user is able to select any program from any of the two (2) inputs and assign them to any of the two (2) RF outputs providing great flexibility.

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



### 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

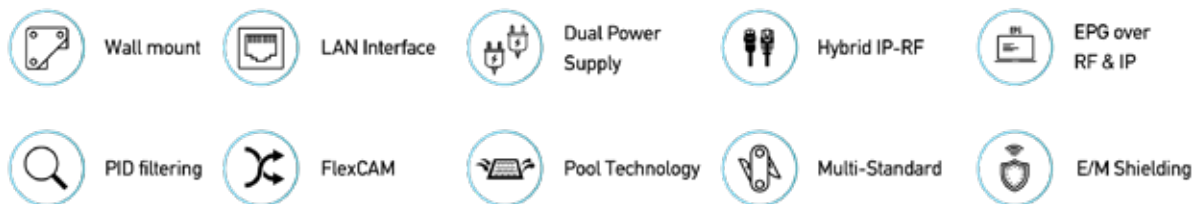
The MLH-101 is a very powerful, all-in-one mini headend device, able to receive up to four (4) HD signals and convert them either in four (4) x DVB-T/C RF output channels.

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





### 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

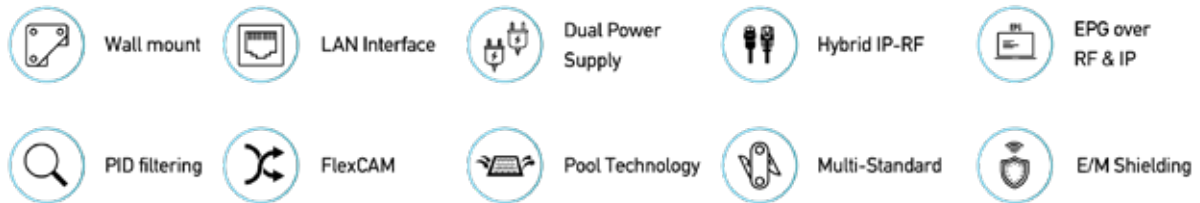
## 2 x HDMI to IP

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)
	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	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	90dB $\mu$ V
Connector	75 $\Omega$ - 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	90dB $\mu$ V
Connector	75 $\Omega$ - 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)

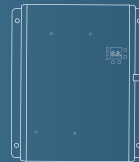
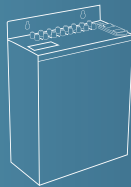
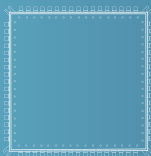
### EAN-13

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

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**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.

## 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

### 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

### 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 / 116dbuV 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
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#### 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 26dB gain / 120dbuV 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 26dB 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
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### 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
------	---------------

#### 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
------	---------------

##### 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
------	---------------

##### 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

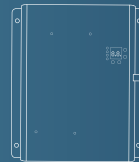
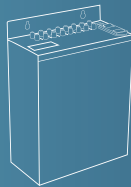
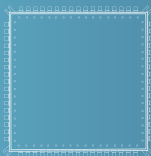
No of inputs	1
No of outputs	1
Connector	F-female to F-male
DC Pass	No

##### EAN-13

Code	5213009761369
------	---------------

##### 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:

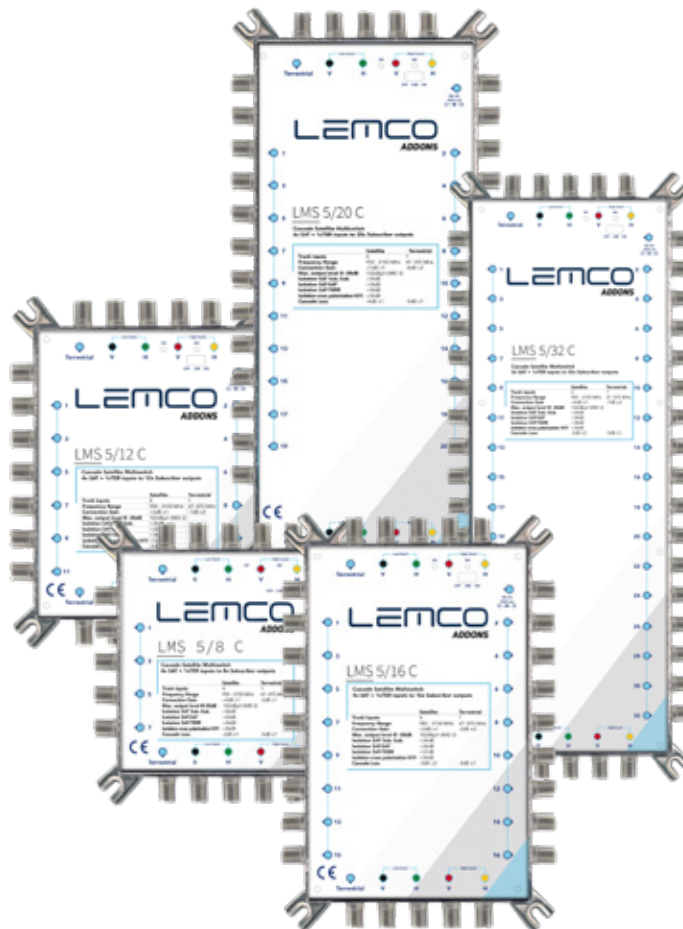


# Satellite

**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
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##### 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**

<b>Input</b>	
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
<b>Output</b>	
No of Subscribers	12
Gain	-1dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
<b>Isolation</b>	
Isolation SAT Subscriber-Subscriber	>35dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>33dB
<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
<b>EAN-13</b>	
Code	5213009760256
<b>General</b>	
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**

<b>Input</b>	
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
<b>Output</b>	
No of Subscribers	12
Gain TER	-1dB ±2
Gain SAT	+3dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
<b>Isolation</b>	
Isolation SAT Subscriber-Subscriber	>35dB
Isolation SAT-SAT	>33dB
Isolation SAT-TERR	>34dB
Isolation cross polarisation H/V	>33dB
<b>Cascade</b>	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-2dB ±1
<b>EAN-13</b>	
Code	5213009760317
<b>General</b>	
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**

<b>Input</b>	
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
<b>Output</b>	
No of Subscribers	16
Gain TER	+2dB ±1
Gain SAT	+1dB ±2
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
<b>Isolation</b>	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-
<b>EAN-13</b>	
Code	5213009760263
<b>General</b>	
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**

<b>Input</b>	
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
<b>Output</b>	
No of Subscribers	16
Gain TER	-2dB ±2
Gain SAT	+2dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω
<b>Isolation</b>	
Isolation SAT Subscriber-Subscriber	>34dB
Isolation SAT-SAT	>34dB
Isolation SAT-TERR	>37dB
Isolation cross polarisation H/V	>34dB
<b>Cascade</b>	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-3dB ±2
<b>EAN-13</b>	
Code	5213009760324
<b>General</b>	
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

<b>Input</b>	
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

<b>Output</b>	
No of Subscribers	20
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760270

<b>General</b>	
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

<b>Input</b>	
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

<b>Output</b>	
No of Subscribers	20
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

<b>Cascade</b>	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1

<b>EAN-13</b>	
Code	5213009760331

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760287

<b>General</b>	
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

<b>Input</b>	
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

<b>Output</b>	
No of Subscribers	24
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

<b>Cascade</b>	
No of outputs (SAT+TER)	4+1
Cascade Loss TER	-5dB ±1
Cascade Loss SAT	-4dB ±1

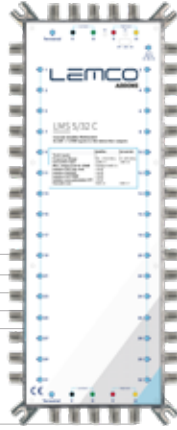
<b>EAN-13</b>	
Code	5213009760348

<b>General</b>	
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

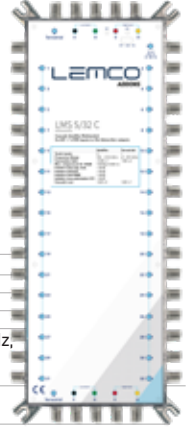
Cascade	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

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
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
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760379

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760430

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760386

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760447

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760393

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760454

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760409

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760461

<b>General</b>	
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

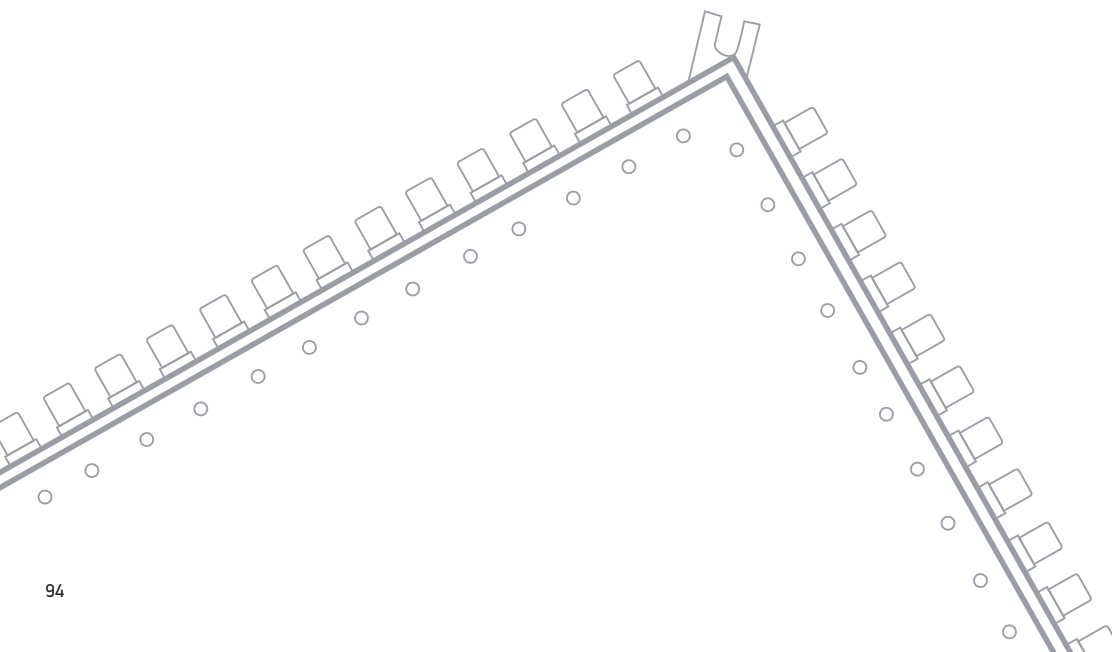
Output	
No of Subscribers	32
Gain TER	-3dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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	
Code	5213009761116

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

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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009761123

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009761130

<b>General</b>	
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 13/12 C

## 13-INPUT CASCADE



### Technical Specifications

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009761185

<b>General</b>	
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 C

## 13-INPUT CASCADE



### Technical Specifications

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009761192

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009761147

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009761208

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009761154

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009761215

<b>General</b>	
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

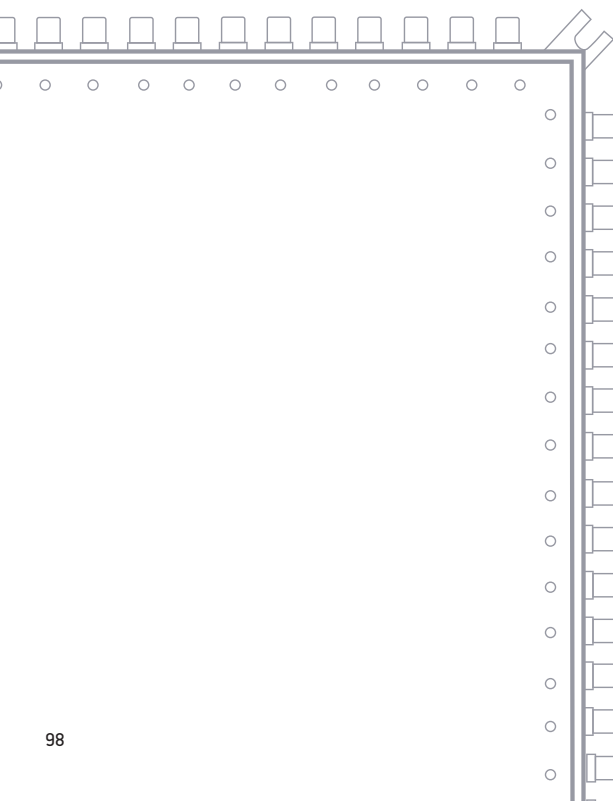
Output	
No of Subscribers	32
Gain TER	-8dB ±1
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760492

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760553

<b>General</b>	
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

<b>Input</b>	
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

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

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760508

<b>General</b>	
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

<b>Input</b>	
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

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

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

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

<b>EAN-13</b>	
Code	5213009760560

<b>General</b>	
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 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 17/20 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 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

<b>Input</b>	
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

<b>Output</b>	
No of Subscribers	32
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

<b>Cascade</b>	
No of outputs (SAT+TER)	-
Cascade Loss TER	-
Cascade Loss SAT	-

<b>EAN-13</b>	
Code	5213009760539

<b>General</b>	
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

<b>Input</b>	
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

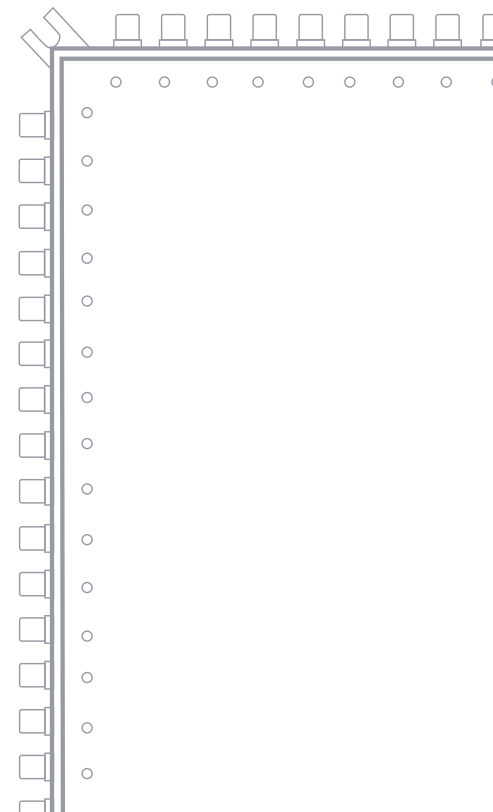
<b>Output</b>	
No of Subscribers	32
Gain TER	-4dB ±2
Gain SAT	+1dB ±1
Max. output level @ -35dB (IMD3)	102dBμV
Connector	F- female
Impedance	75Ω

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

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

<b>EAN-13</b>	
Code	5213009760591

<b>General</b>	
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

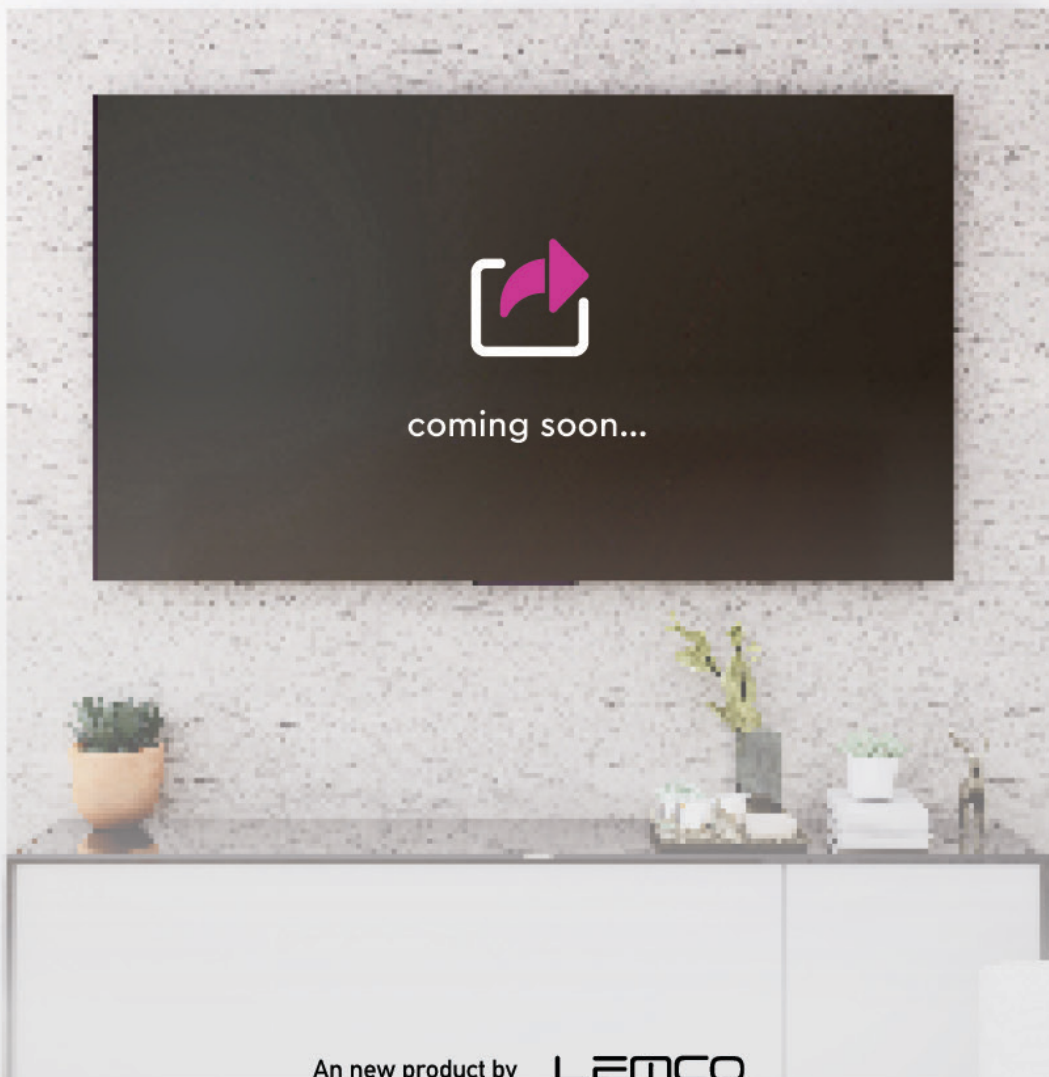


The logo for Fleex Prime features a stylized icon on the left consisting of a white square with a pink arrow pointing right, partially enclosed by a white line. To the right of this icon, the word "FLEEX" is written in a bold, black, sans-serif font. Below "FLEEX", the word "prime" is written in a smaller, pink, lowercase sans-serif font.

# FLEEX prime

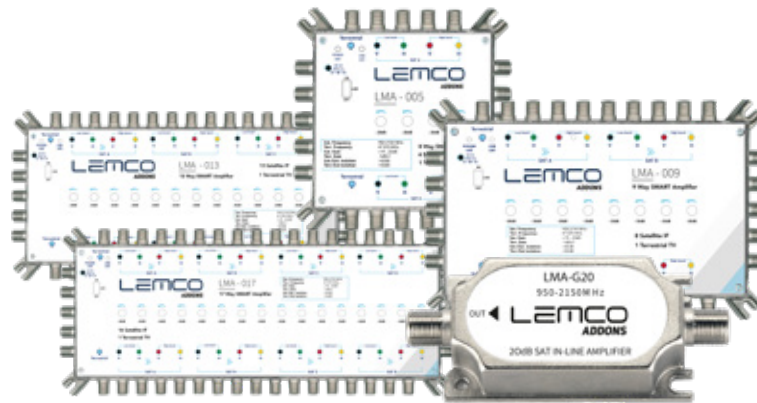
Meet the ultimate experience with the upcoming "Fleex Prime" by connecting and interacting with your customers and make their experience unique by enhancing their accommodation with a complete suite of new technological services.

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- 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...



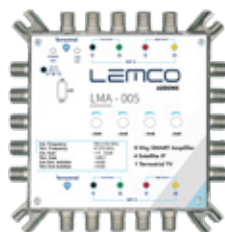
# SATELLITE AMPLIFIERS

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

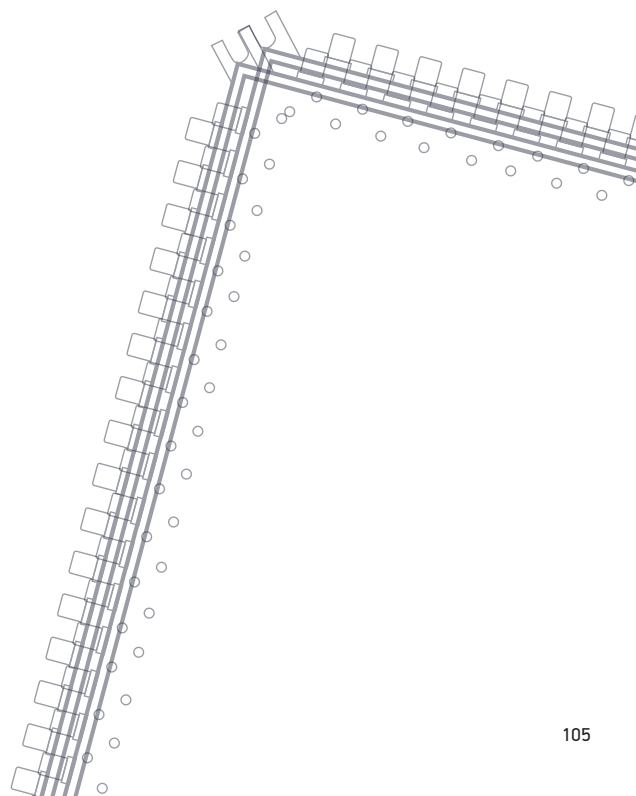


## Technical Specifications

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-inputs 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
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#### 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-inputs 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
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#### 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**

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all over the world

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EU manufactured

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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 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
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#### 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
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#### 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

### QUATRO 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 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
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#### 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.)

P1 dB	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
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#### 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

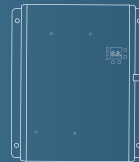
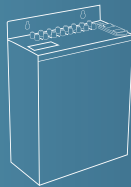
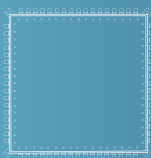


**EAN-13**

Code 5213009760812

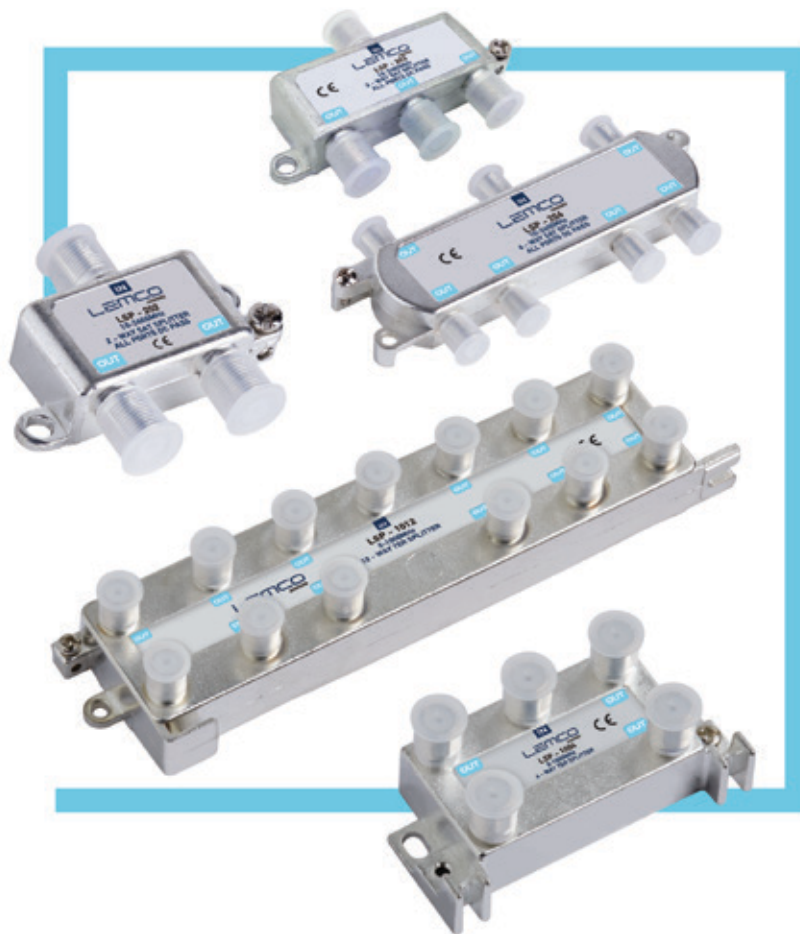
**General**

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

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**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
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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	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
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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	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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤3.5dB max
40-470 MHz	≤3.6dB max
470-860 MHz	≤3.8dB max
860-1000 MHz	≤4.0dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	2
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009760683
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤6.0dB max
40-470 MHz	≤6.0dB max
470-860 MHz	≤5.8dB max
860-1000 MHz	≤6.2dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	3
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009760690
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤7.0dB max
40-470 MHz	≤7.0dB max
470-860 MHz	≤7.5dB max
860-1000 MHz	≤8.2dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	4
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009760706
<b>General</b>	
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

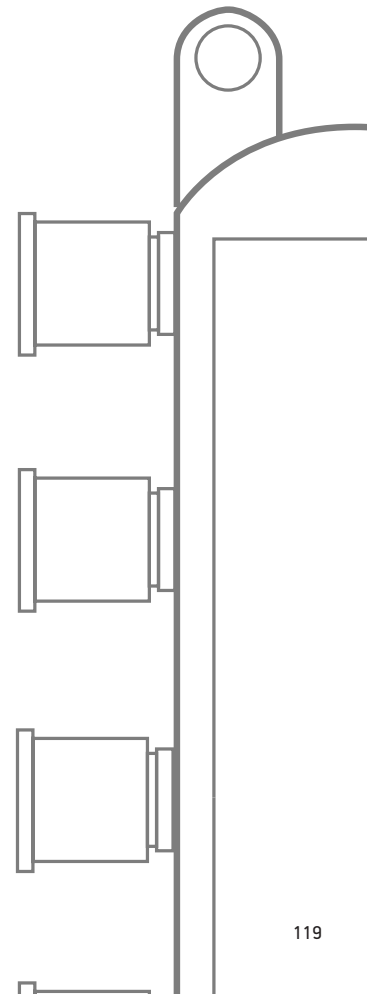
<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤10.5dB max
40-470 MHz	≤10.5dB max
470-860 MHz	≤11.5dB max
860-1000 MHz	≤12.0dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	8
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009760720
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤9.0dB max
40-470 MHz	≤9.0dB max
470-860 MHz	≤9.5dB max
860-1000 MHz	≤10.5dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	6
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009760713
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5 - 40 MHz	≤ 3.5dB max
40 - 470 MHz	≤ 3.6dB max
470 - 860 MHz	≤ 3.8dB max
860 - 1000 MHz	≤ 4.0dB max
<b>Return Loss (in-out)</b>	
5 - 40 MHz	≥ 25.0dB
40 - 470 MHz	≥ 25.0dB
470 - 860 MHz	≥ 22.0dB
860 - 1000 MHz	≥ 20.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	2
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761642
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤5.5dB max
40-470 MHz	≤5.5dB max
470-860 MHz	≤6.0dB max
860-1000 MHz	≤6.2dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥22.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	3
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761659
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤7.0dB max
40-470 MHz	≤7.2dB max
470-860 MHz	≤7.6dB max
860-1000 MHz	≤8.0dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
<b>Isolation (out-out)</b>	
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

<b>Connectors</b>	
No of inputs	1
No of outputs	4
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761666
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤10.0dB max
40-470 MHz	≤10.0dB max
470-860 MHz	≤10.5dB max
860-1000 MHz	≤11.0dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	6
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761673
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤10.5dB max
40-470 MHz	≤11.0dB max
470-860 MHz	≤11.5dB max
860-1000 MHz	≤12.0dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥20.0dB
860-1000 MHz	≥20.0dB
<b>Isolation (out-out)</b>	
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
<b>Connectors</b>	
No of inputs	1
No of outputs	8
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761680
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω
<b>Insertion loss (in-out)</b>	
5-40 MHz	≤12.5dB max
40-470 MHz	≤12.5dB max
470-860 MHz	≤13.5dB max
860-1000 MHz	≤14.5dB max
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB
<b>Isolation (out-out)</b>	
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

<b>Connectors</b>	
No of inputs	1
No of outputs	12
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch
<b>EAN-13</b>	
Code	5213009761697
<b>General</b>	
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

<b>Electrical</b>	
Frequency range	5-1000MHz
Impedance	75Ω

<b>Insertion loss (in-out)</b>	
5-40 MHz	≤14.5dB max
40-470 MHz	≤14.5dB max
470-860 MHz	≤15.5dB max
860-1000 MHz	≤16.0dB max

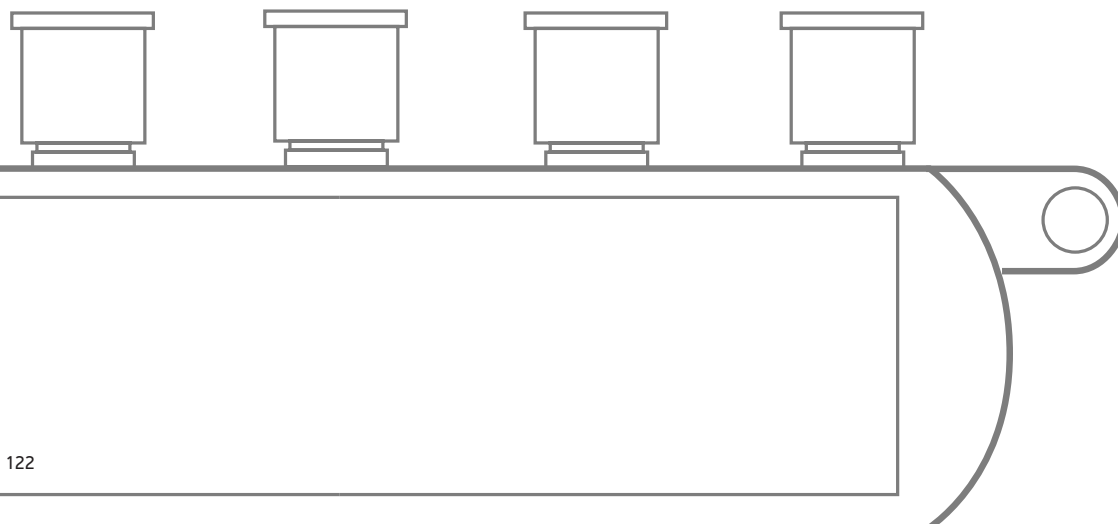
<b>Return Loss (in-out)</b>	
5-40 MHz	≥20.0dB
40-470 MHz	≥20.0dB
470-860 MHz	≥18.0dB
860-1000 MHz	≥17.0dB

<b>Isolation (out-out)</b>	
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

<b>Connectors</b>	
No of inputs	1
No of outputs	16
Connector	F-female
Connector screw thread	3/8"-32UNEF Inch

<b>EAN-13</b>	
Code	5213009761703

<b>General</b>	
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.



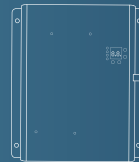
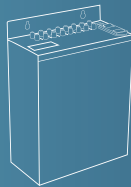
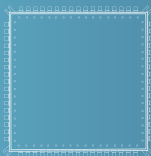
Using our more than 45 years of experience in digital technologies Lemco Integrator sub-branch offers high quality services of installation in any upcoming project.



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](http://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:



# 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
Plating	
Body Parts	Nickel
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761437
General	
Dimensions	20*11mm
Net weight	3.4gr
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-002



### Technical Specifications

Characteristics	
Type	F male compression connector (Supreme 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
Plating	
Body Parts	Nickel
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761444
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
Plating	
Body Parts	Nickel
Temperature	
Installation	- 5° to + 50°C
Operation	- 40° to + 100°C
Storing	- 40° to + 100°C
EAN-13	
Code	5213009761451
General	
Max. Tensile strength	260N
Dimensions	25,65*11mm (compressed)
Net weight	9.4gr
Package qty	100pcs



## 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
------	---------------

#### 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
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#### 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-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

## 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
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#### General

Dimensions	22*24mm
Net weight	11.2gr
Package qty	100pcs



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
------	---------------

#### 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-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

## 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



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
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
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
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

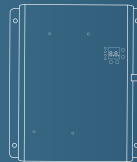
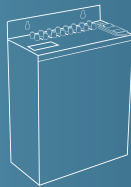
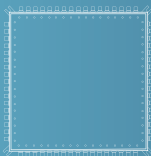
EAN-13	
Code	5213009761000

General	
Dimensions	12*2.5cm
Net weight	58gr



Advertise your needs  
and communicate your news.

An new product by LEMCO



## > 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	∅ C 1.00mm pure copper
Insulation	∅ 4.80mm skin-foam-skin
External Conductor	1st aluminum foil bonded to insulation + copper tin wired mesh + 2nd aluminum strip
External Investing	∅ 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
------------------------	--



# 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	∅ 1.13mm pure copper
Insulation	∅ 4.80mm skin-foam-skin
External Conductor	1st aluminum strip + aluminum wire mesh + 2nd aluminum strip
External Investing	∅ 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)

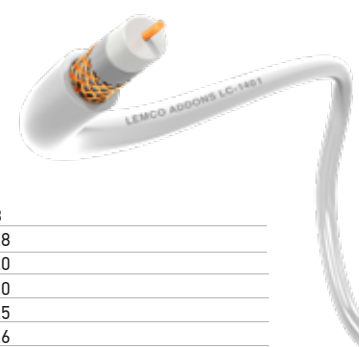
100 MHz	5.8
400 MHz	11.8
860 MHz	17.0
1000 MHz	19.0
1500 MHz	23.5
1750 MHz	25.6
2150 MHz	28.5
2400 MHz	30.3
3000 MHz	34.0

#### EAN-13

Code	5213009760614
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#### Mechanical features

Minimum Bending Radius	35 mm for a bend 70 mm for repeated bends
------------------------	--



# 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	∅ 1.13mm pure copper
Insulation	∅ 4.80mm skin-foam-skin
External Conductor	1st aluminum strip + aluminum wire mesh + 2nd aluminum strip
External Investing	∅ 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++)
----------------------------	-------

#### 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
------	---------------

#### Mechanical features

Minimum Bending Radius	35 mm for a bend 70 mm for repeated bends
------------------------	--



# 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
------	---------------

### 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
------	---------------

### 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

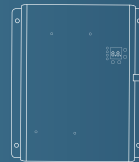
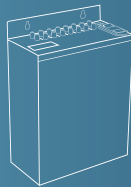
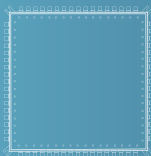
Connector	HDMI male(19pin) to HDMI male (19pin)
Material	24K Gold plated
Conductor	5C x 30AWG
Drain Wire	5C x 30AWG
Insulation	5C foamed PE
Mylar	Double AL/MY
Braid	16/4/0,11Al-MIG Tinned
Jacket	Φ 6.00mm BK PVC

### EAN-13

Code	5213009761284
------	---------------

### 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**

# DVB-T

DVB-T set-top-box able to decode Full HD H.265 signal in a metal case design, with dual remote.

## 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 Specifications

Type	RF DVB-T/T2
Input 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

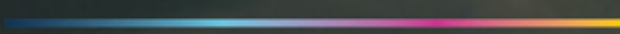
#### General

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



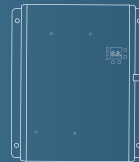
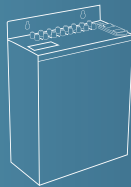
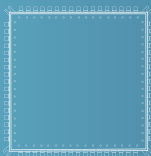


Theron is hunting  
down the competition



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

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# SOFTWARE

---

**Fleex Embedded · Fleex Prime · Fleex DS**



 **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.



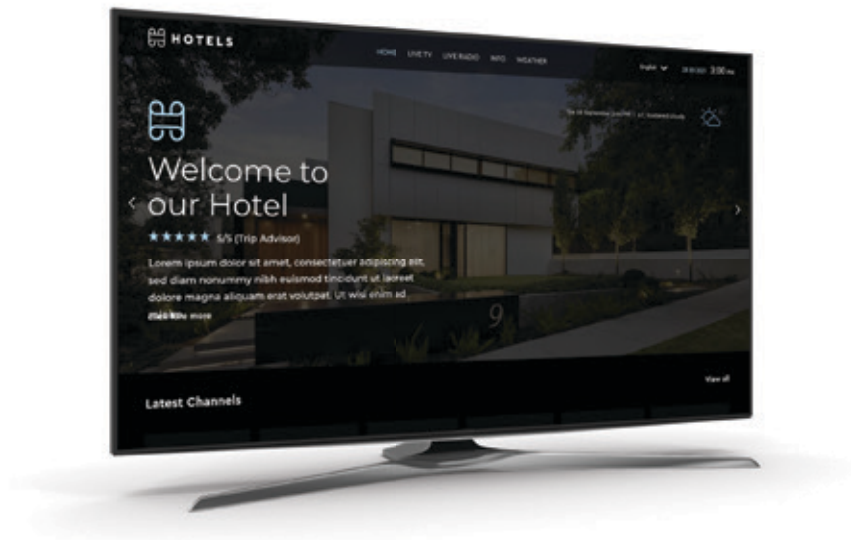
Enjoy the most essential features of an IPTV solution.



The most complete and affordable IPTV middleware solution worldwide that covers everything you need and many more.



Advertise your needs and communicate your news.



**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

## Why Fleex?

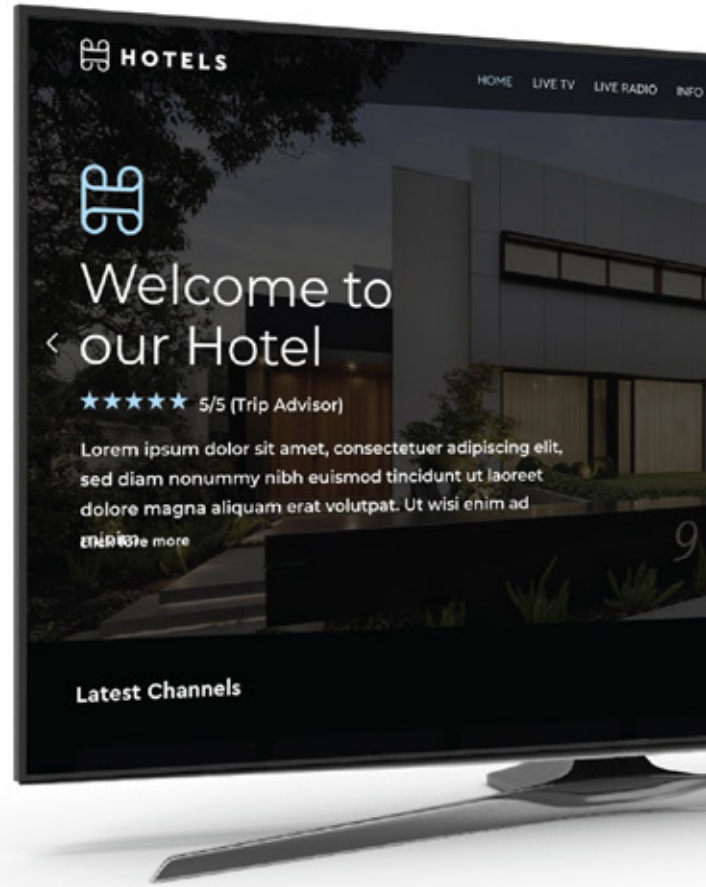
- ▶ Highly innovative and intelligent
- ▶ Evolves continuously by absorbing your feedback
- ▶ State of the art design
- ▶ Scalable and modular approach to meet your needs at 100%
- ▶ One-stop solution
- ▶ Ease of use provided by a friendly interface
- ▶ Excellent support
- ▶ Unlimited training
- ▶ Value for money solution
- ▶ Minimal upkeeping effort



The most affordable and amazing IPTV middleware solution able to operate in all Lemco headends from Pro and Compact Line series just became a reality by offering superb experience, a majority of options, ease of use and complete control of all TV monitors in small to medium installations.

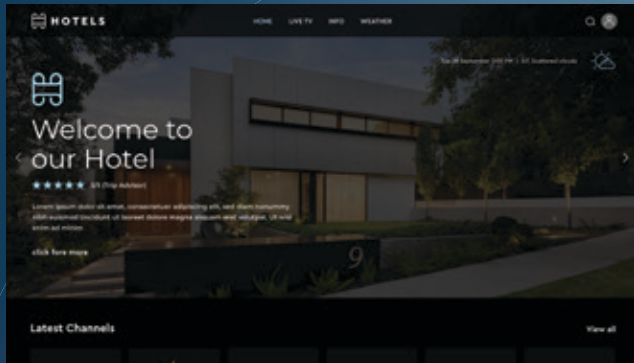
## Features

- Live TV
- Live Radio
- Up to 10 Info pages
- Weather info
- Time/Date info
- "Alarm" functionality
- Support up to 500 TVs
- Support of LG, Samsung, Philips Hotel Smart TVs
- External STB supported
- Unlimited languages
- Very easy interface
- One-time fee license

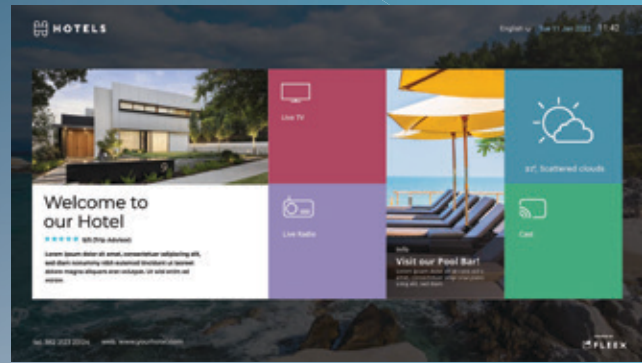


# Multiple Themes

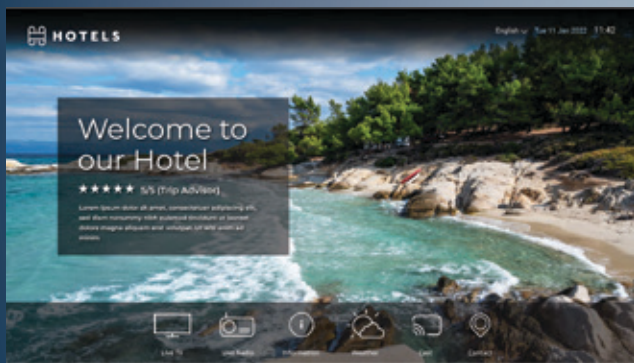
## Choose the one you like!



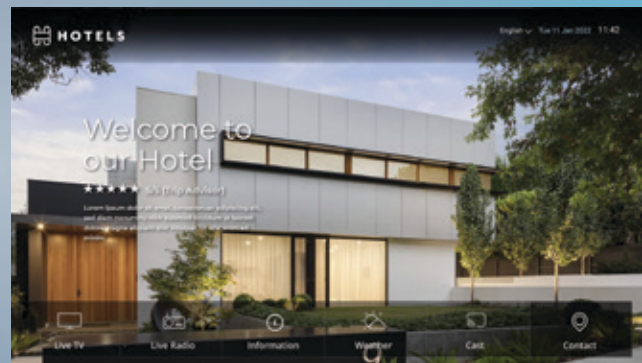
**Flex theme**



**Windows theme**



**Minimal theme**



**Classic theme**



**In-Style theme**

Fleex provides a variety of ready off-the-shelf themes, each one with a completely different styles and colors, to provide a unique feeling and experience to the end user.



# Live TV/Radio



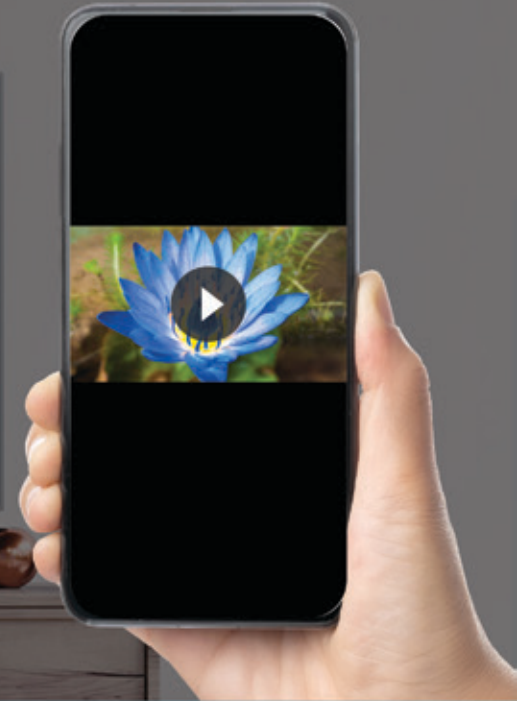
Watch your favorite TV channels and listen your favorite Radio programs from Fleex's state-of-art embedded player which provides video resolutions up to 4K and supports a wide variety of different video and audio codecs and standards.

## Up to 8000 ready off-the-shelf logos!

Select your logo icon for your TV programs from Fleex's internal library consisting of up to 8000 ready off-the-shelf logos from most well-known TV providers worldwide.

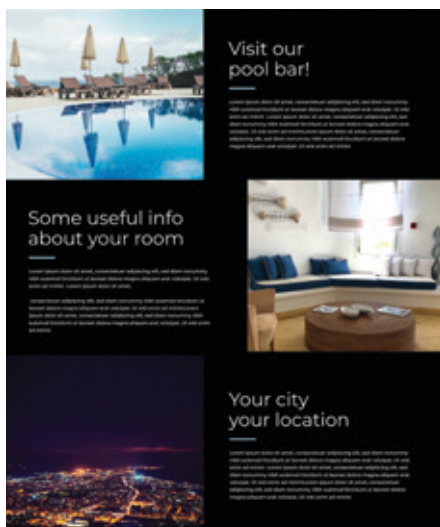
## EPG support

Fleex's EPG engine is able to display Electronic Program Guide information (EPG) by providing all the available information received from any live TV or Radio channel, like current and upcoming broadcast programming, program description, participating actors or singers and/or any kind of related to specific program information, in real time.



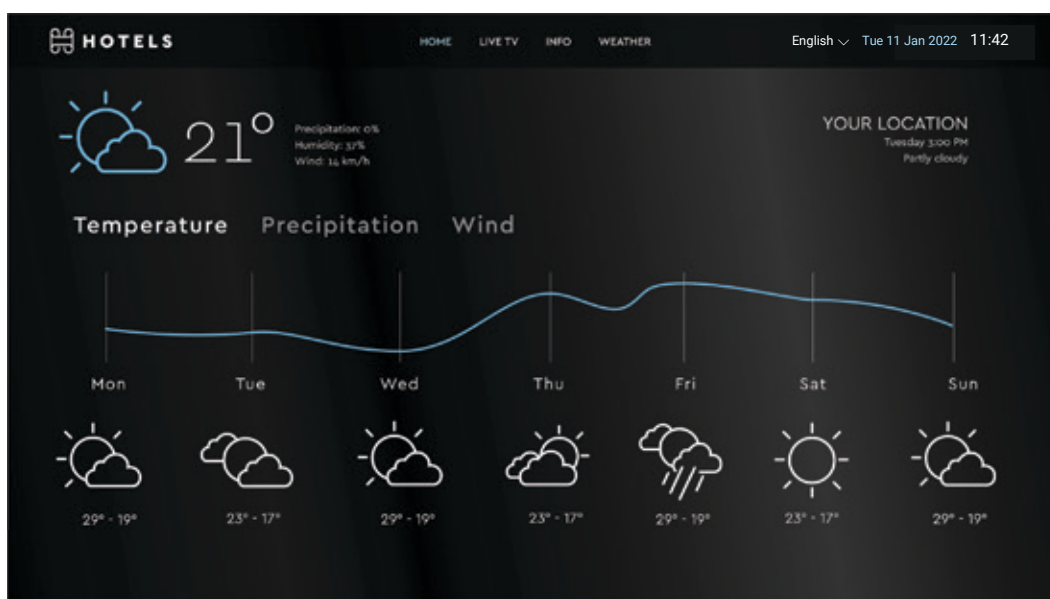
## Cast

Connect all your mobile devices, like Android smartphones and tablets, iPhones and iPads or your laptop, using wireless technology and share your screen to any TV monitor by casting movies, TV shows, photos, entire websites or tabs from a Chrome browser (on Windows computers, Macs, Chromebooks etc) and many more...



## Info

Keep your visitors up to date by providing detailed information about offered services, let them know about your latest offers, advertise your strengths and promote your facilities, all at the same time by using Fleex's INFO functionality.

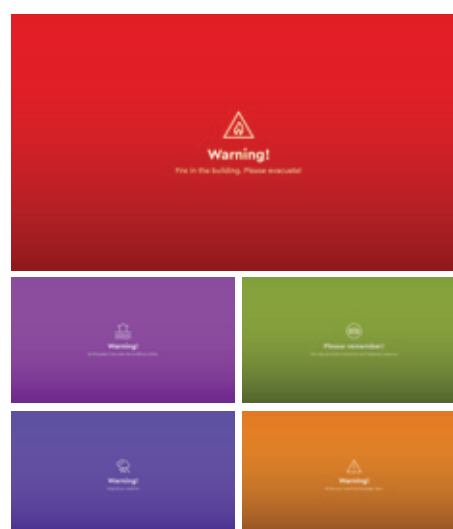


## Weather

Provide weather information by accessing current and 7-day weather data for any location on Earth including over 200,000 cities, by collecting and processing weather data from different sources such as global and local weather models, satellites, radars and a vast network of weather stations.

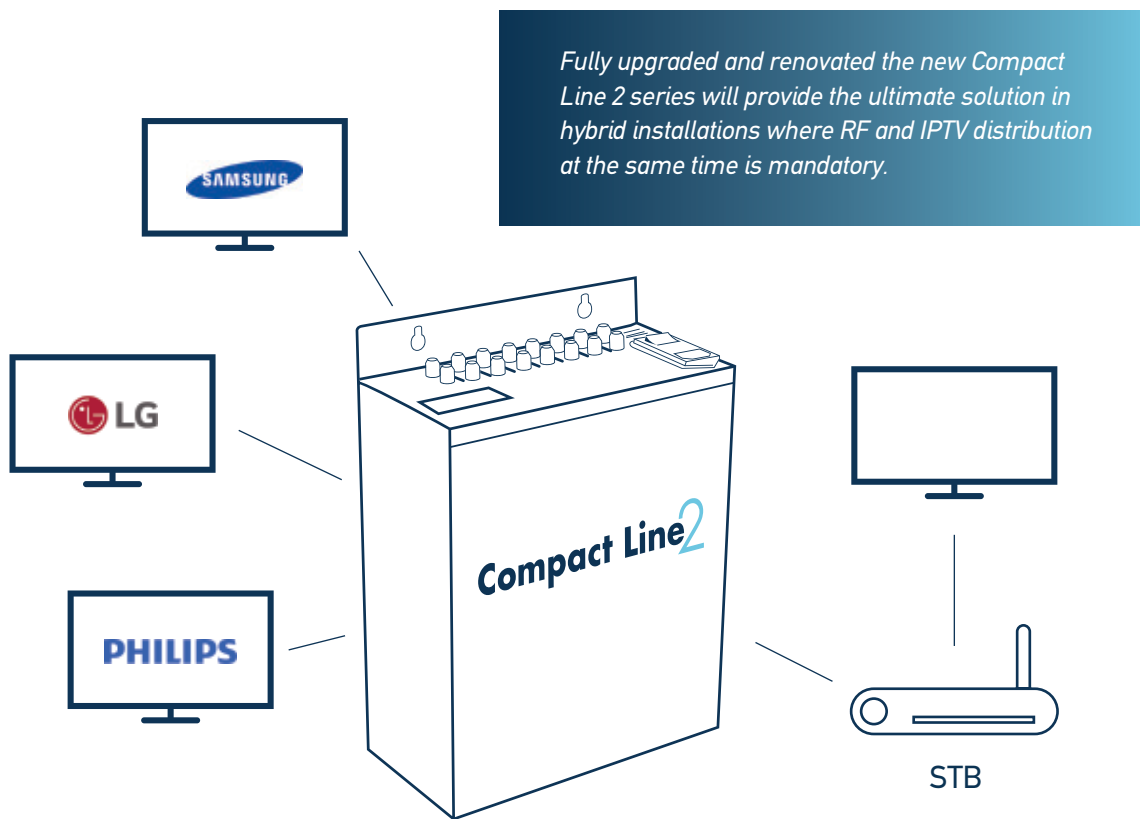
## Alarm

Safety first! Inform your guests of any emergency situation such as fire, earthquake, typhoon, flood etc and provide them instructions to evacuate the building or follow specific safety procedures and guidelines by using Fleex's "Alarm" functionality. An optimal solution for any kind of emergency situations able to even support people with disabilities by utilizing optical as well as audio signals.



# Hardware

There is no need of any external server, since Fleex embedded is able to operate from inside the Lemco Compact and Pro Line headend series, keeping the total solution simple and cost effective. The Headends in this case act as a Fleex server while distributing all your favorite TV and Radio channels to your installation.



*Flexible and completely dominant the new Pro Line headend series will satisfy any need in even the most demanding applications by utilizing its new 16-input to 16-output hardware platform in 1U rack size offering more than 10 available different models and raising the competition to the limit.*

**Pro Line**

## Supported TVs

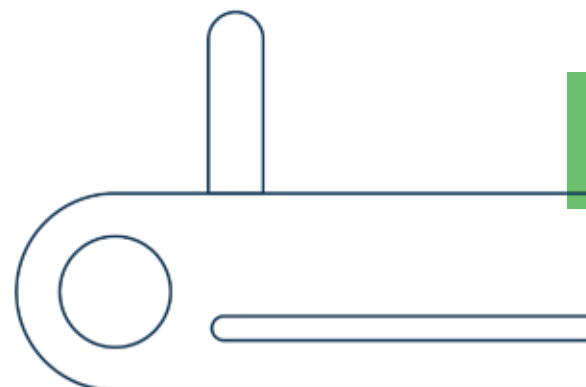
Fleex supports all professional hotel IPTV models of the most major TV manufacturers such as LG, Samsung and Philips, providing the ultimate embedded solution. Fleex acts as a one-stop solution allowing the implementation of hybrid installations in which different models from different TV brands (LG, Samsung, Philips) may exist without the need of dedicated servers by keeping the overall installation and setup complexity at low levels, requiring minimum effort.



## Supported STB

In case of non-Smart or old TVs, the Fleex Set-Top-Box provides the optimum solution by offering all those features that a professional IPTV installation requires:

- Quad-Core ARM Cortex-A55 @ 1.8GHz
- 2GB LPDDR4
- 2xUSB2.0 ports
- 1x internal USB2.0 port for remote control
- Smart remote control with Air mouse functionality and keypad
- 1x Gbit LAN RJ45 port
- PoE and NON-PoE versions
- HDMI 2.0 out @ 4Kp60
- HDMI in (For chromecast option)
- 2.4G WiFi (802.11b/g/n) with external antenna
- Support of Bluetooth 4.0
- MicroSD card slot
- Power supplied from USB port (using external power supply or TV's USB port)
- Ability to print your logo on the STB and/or remote control
- Compact size
- Metal design for 24/7 continuous operation
- 5-year warranty



# LEMCO



[www.lemco.gr](http://www.lemco.gr)

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