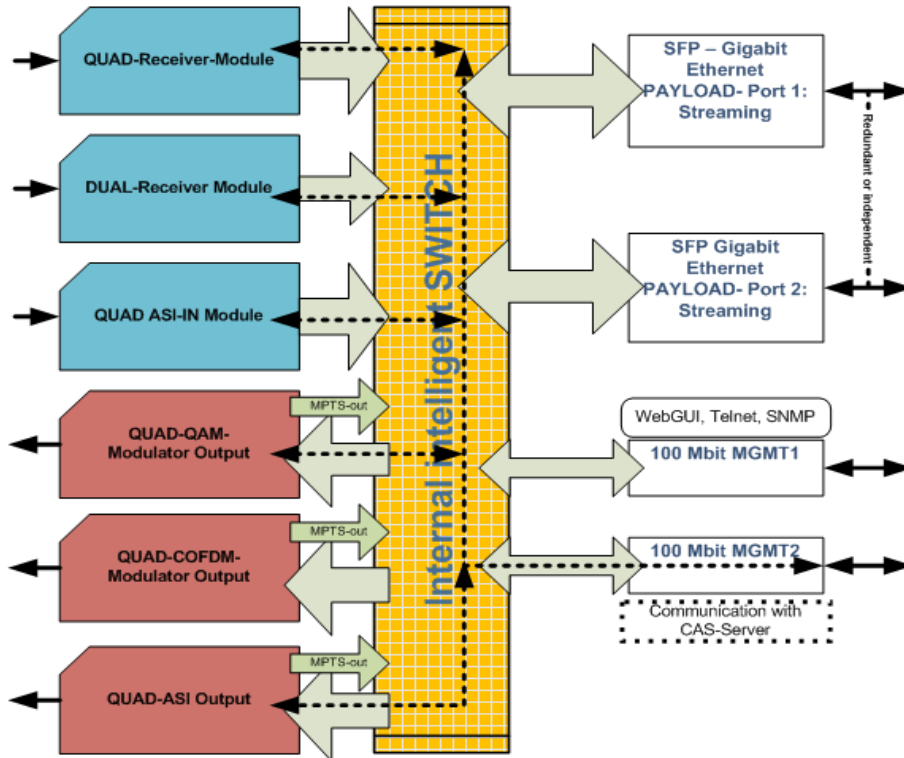




The **LUMINATO** chassis has six module slots and the Multireceiver module can be fitted to any of them. Advanced video processing can be performed in the receiver module and additional output modules are not necessary in pure IP based Headend solutions. (Several other modules for processing and modulating available-> See teleste.com)

The output of the receivers is always fully DVB compatible IP stream containing automatically generated PSI/SI streams. The output can be either carried as Multi Program Transport Stream or de-multiplexed to Single Program Transport Streams, which are directly suitable for IPTV networks and allow highly flexible stream routing and re-multiplexing on Cable TV networks.

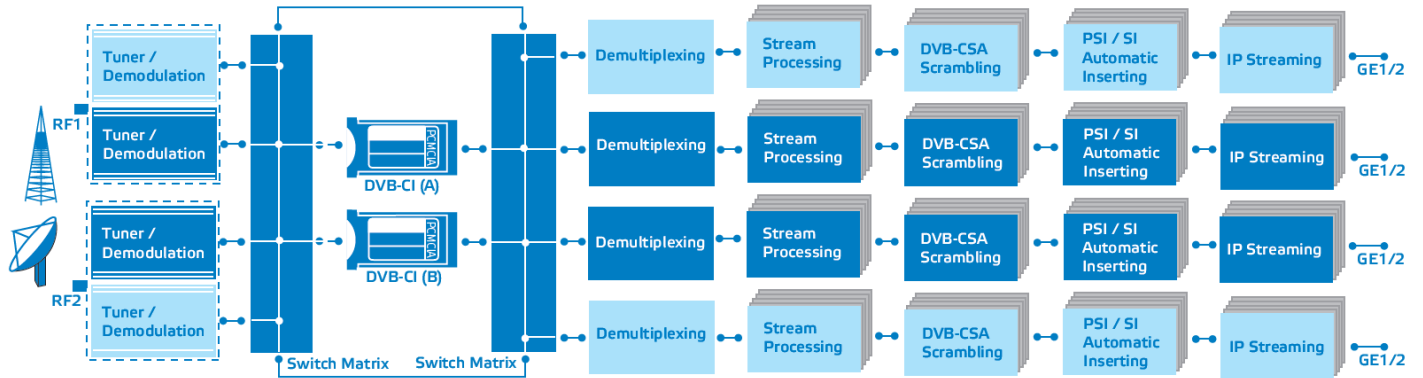


The LUMINATO Multireceiver supports video resolutions from SD (Standard Definition) to UHD (Ultra High Definition) in MPEG-2, MPEG-4 AVC and HEVC video formats and numerous audio formats such as AAC or MPEG. Over the years, LUMINATO has proven to be one of the most reliable Headend platforms on the market. There are thousands of LUMINATO devices operational around the world and serving subscribers with tens of thousands of services around the clock. Yet, the failure rate is lower than 0,3%.

The intuitive user interface makes management of LUMINATO effortless – everything is visible in a single graphical display, and administrators can add new services simply by drag-and-drop. This eliminates a lot of the manual configuration work and provides an easily understandable view on the network. Services can be set up within a few minutes, and yet you have access to all DVB finesses. LUMINATO also provides a simple but effective command line interface (CLI) for those appreciating extreme simplicity. Realistic view to module composition - Drag and drop services with multiple selection - Simple and intuitive navigation - Device status at single glance - Playlist view to all available channels - Search available for easy finding of all services - Monitoring with any PC including tablet computers

Multi-standard receiver in a nutshell:

- Two physical ports: Several possible input configurations
- Descrambling on all of the inputs
- DVB-S2X reception for efficient high bitrate satellite video
- Advanced transport stream processing
- All input alternatives are enabled with software and available w/o additional software licenses
- High service availability with input stream redundancy
- Multiple services per receiver – high efficiency, lower investments
- Embedded security – services can't be accessed in unprotected format
- Hot swap as standard – swap the module and keep the configurations



Block Diagram, Dual / Quad Receivers (only Quad C and T/T2 Receivers).

Technical specifications (partly) for more details about all available modules, please contact us...

Parameter	Specifications	Note
CHASSIS		19" 480x400x1RU
Supply voltages	90...230V AC IN, 24V DC, 120W max	low power consumption design
optional redundant PSU available	-48VDC or 230VAC available	internal or external mounting int.: occupies 2 Slots
CLI (telnet / ssh, USB-serial), SNMP, Web-UserInterface	6 Module slots	hot swap, flexible
IP Streaming	Unicast or Multicast, CBR/VBR	GbE SFP eltr. or optical
Packet format	1...7	DVB transport packets in UDP/IP or RTP/P
Max. IP streamer per module	120	SAP/SDP support
Max. streaming capacity per module	394 Mb/s	CSA scrambling
	490 Mb/s	AES scrambling
Satellite receiver RF input – DVB-S / DVB-S2 / DVB-S2X	Dual Input, 2x CI	CAM's independent routable
Impedance	75 ohm	F- Female
Standard	DVB-S, DVB-S2, DVB-S2X	ETS300421, ETS302307, BlueBook A83-1 EN302307-2/ BlueBook A83-2
Frequency range	950 ... 2150 MHz	
Spectral Inversion	Automatic	
AFC Range	8 MHz	
LNB Supply	ON/OFF: 13/18VDC, 22KHz, DiSEqC 1.1	Total DC feed power must be less than main PSU capacity minus installed module
Max output current per connector	500mA	
Constellation	QPSK, 8PSK, 16APSK, 32APSK	
FEC modes (autodetected)	All ratios compliant with ETS302307	
Signal levels	-70... -25 dBm	
Symbol rate	1,5...67,5 MS/s	
Transport Stream Bitrates per input	up to 145 Mb/s	
Dimensions	20 x 109 x 253 mm	
Power consumptions	14W	excl. CAM's and DC feeds
Weight	0,3kG	
Enclosure classification	IP21	
Operating / Storage temperature	-10...+55 °C / -30...+70 °C	specification is met 0...+45 °C
DVB Common Interface Descrambling		
Connector	PCMCIA	dual slots
Standard	DVB_CI EN50221	
CA module	PC-Card type II	hot plug
TS bitrate	up to 192 Mbit/s	
Note: Aston, SmarDTV, NEOTION and SMIT CA modules are verified to operate with DXP 400		

LUMINATO MULTIRECEIVER			
Parameter	Specifications	Note	
Satellite receiver RF input – DVB-S / DVB-S2 / DVB-S2X			
Impedance	75 ohm	Connectors, RF	F female
Frequency range	950 ... 2150 MHz		
AFC Range	8 MHz		
Constellation	QPSK, 8PSK, 16APSK, 32APSK		
FEC modes	(autodetected) All ratios compliant with ETS302307		
Spectral Inversion	Automatic		
Signal levels	-70... -25 dBm		
Symbol rate	1,5...67,5 MS/s		
Transport Stream Bitrates per input	up to 145 Mb/s		
Adjustable LNB voltage	off/13/18 V		
Max output current per connector	500 mA		2)
22 kHz tone	on/off		
DiSEqC	v 1.1		
Standard	ETS300421, ETS302307, BlueBook A83-1 EN302307-2/ BlueBook A83-2	DVB-S, DVB-S2 DVB-S2X	
Terrestrial receiver RF input – DVB-T / DVB-T2 / ISDB-T			
Impedance	75 ohm	Connectors, RF	F female
Frequency range	47...862 MHz		
Constellation	QPSK, 16QAM, 64QAM 256QAM DQPSK	DVB-T/T2/ISDB-T DVB-T2 ISDB-T	
FEC modes (autodetected)	All ratios compliant with standards		
Adjustable voltage	off/13		
Max output current per connector	500 mA		2)
OFDM spectrum	2k, 8k 2k, 4k, 8k 1k, 2k, 4k, 8k, 16k, 32k	DVB-T ISDB-T DVB-T2	
Segments	Full (13seg)	ISDB-T	
Signal levels	-90 ... -20 dBm		
Channel Bandwidth	6, 7, 8 MHz		
Transport stream bitrates per RF input	According to standards		
Standard	EN300744 EN302755 V1.4.1 Nordig unified ver 2.2.1 ABNT NBR 15601	DVB-T DVB-T2 DVB-T/T2 ISDB-T	
Cable receiver RF input - DVB-C			
Impedance	75 ohm	Connectors, RF	F female
Frequency range	110...862 MHz		
Constellation	16QAM, 64QAM, 128QAM, 256QAM		
FEC modes (autodetected)	All ratios compliant with standards		
Levels	-65...-32 dBm		
Channel bandwidth	7, 8 MHz		
Symbol rate	4... 7,2 MS/s		
Standard	ITU-T J.83 Annex A,B and C; EN 300 429, Nordig unified ver 2.2.1		
IP Input (quad module only)			
Packet format	UDP/IP 1...7 TS packets per frame		
Traffic type	unicast or multicast		
Input streams per module	2		
Maximum bitrate per input	192 Mb/s in format CBR & VBR		
IP Streaming			
Packet format	1...7 DVB transport packets in UDP/IP or RTP/P		
Traffic type	unicast or multicast		
Max. IP streamer per module	120		
Max. streaming capacity per module	394 Mb/s 490 Mb/s	CSA scrambling AES scrambling	
DVB Common Interface Descrambling			
Connector	PCMCIA	dual slots	
Standard	DVB CI EN50221		
CA module	PC-Card type II		
TS bitrate	up to 192 Mbit/s		
DVB CSA and AES Content Protection			
Max services to be scrambled per module	120		
DC Feed			
Adjustable voltage	off/13/18 V		1)
Max output current per connector	500 mA		2)
General	Supply voltages	24 V	
Power consumption	14 W		3)
Weight 0,3 kg	Enclosure classification IP21		
Dimensions	20 x 109 x 253 mm		h x w x d, 4)
Operating temperature -10...+55 °C	Storage temperature -30...+70 °C		Specification is met 0...+45 °C

Notes

- 1) On terrestrial reception 13 V only
 - 2) Do not exceed the chassis PSU total power capacity when feeding external devices
 - 3) Excluding CAM modules and DC feed.
 - 4) Dimensions excluding connectors and locking screws.
- All Subjects to change w/o further notice and © by Teleste