

CHP - Compact High Performance Headends

IPQAM

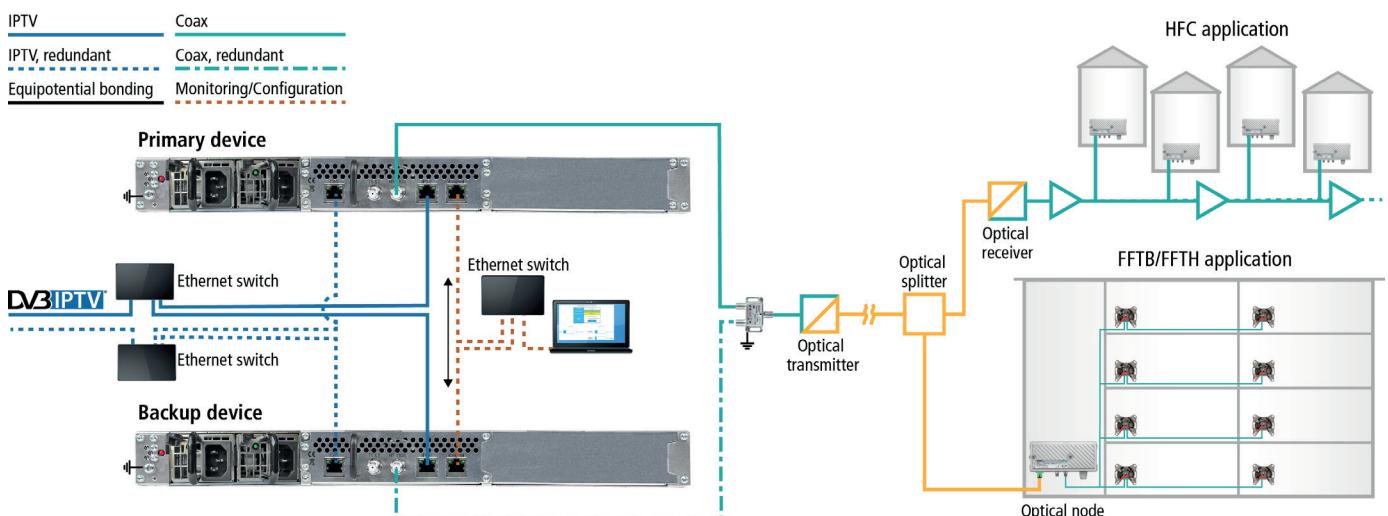
- ✓ Redundant IPTV inputs (900 Mbps)
 - ✓ Supports SPTS and MPTS (also mixed)
 - ✓ Re-Multiplexing
 - ✓ PID filtering/ PID remapping
 - ✓ Program duplication
 - ✓ Output modulation DVB-C (J.83 Annex A/C) or DVB-T
 - ✓ Web-based configuration
 - ✓ Suitable for AXING SMARTPortal
 - ✓ Supports SNMP
 - ✓ 2 x redundant power supply units
 - ✓ Device redundancy configurable*
 - ✓ OTA upgrade e.g. for Set Top Boxes possible
 - ✓ Interface for CASimulcrypt Server**

* MIS 1-11 required | **in November 2020



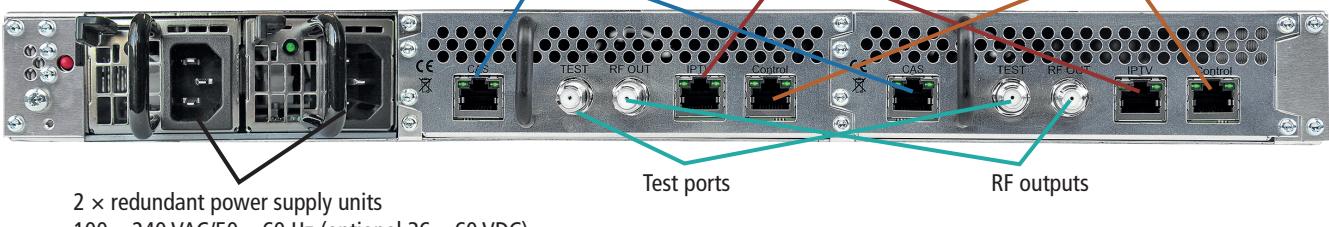
Available devices:

MIE 8-00	Includes 1 module, transmodulates max. 512 input streams in 8 DVB-C or 6 DVB-T output channels.
MIE 16-00	Includes 1 module, transmodulates max. 512 input streams in 16 DVB-C or 12 DVB-T output channels.
MIE 32-00	Includes 2 modules, transmodulates max. 2×512 input streams in 2×16 DVB-C or 2×12 DVB-T output channels.
MIM 16-00	Extension module for MIE 8-00/16-00, for extension to 2×512 input streams and 2×16 DVB-C or 2×12 DVB-T output channels.
MIS 1-11	Software extension for MIE device redundancy
MIS 8-16	Software extension for MIE 8-00, from 8 to 16 x DVB-C or from 6 to 12 x DVB-T output channels.



Back panel

MIF 32-00



Technical data

Type	MIE00800	MIE01600	MIE03200
Input			
Supported input transport streams		SPTS, MPTS (CBR/VBR)	
Max. number of input streams (out of SPTS or MPTS)	512	512	2 × 512
Supported protocols IPTV input		IP V4; UDP; RTP; IGMP v2, v3	
Total net data rate IPTV input	1 × 900 Mbps	1 × 900 Mbps	2 × 900 Mbps
Transport streams			
Modifiable program information		Program name, SID remapping, PID filtering, TSID, ONID	
PCR correction		automatic adaptive PCR-correction, <500 ns	
L C N		Yes	
NIT handling @ DVB-C		auto manual off	
EPG regeneration		Yes	
Scrambling		LG Pro:Idiom Samsung LYNK AES 128 DVB-CSA*	
Output			
Number of output channels	1 × 8 @ DVB-C 1 × 6 @ DVB-T	1 × 16 DVB-C 1 × 12 DVB-T	2 × 16 DVB-C 2 × 12 DVB-T
Output frequency range		109...1006 MHz @ DVB-C 109...862 MHz @ DVB-T	
Output channels adjustable		S2...K87 @ DVB-C S2...K69 @ DVB-T	
Output channel bandwidth		7 MHz, 8 MHz	
Possible frequency shift		-4...+4 MHz (0.5 MHz steps)	
Output connector	1 × F-female	1 × F-female	2 × F-female
Output test port	1 × F-female (-30 dB)	1 × F-female (-30 dB)	2 × F-female (-30 dB)
Output impedance		75 Ω	
Output level adjustable		80...105 dBµV @ DVB-C 77...102 dBµV @ DVB-T	
Output modulation			
Output compliance		EN 50083-9 ETSI TS 101 154 ETSI EN300 429 ETSI EN 300 744 ITU-T J.83A/C	
Output modulation, modulation type		QAM32, QAM64, QAM128, QAM256 @ DVB-C QPSK, QAM16, QAM64 @ DVB-T	
Supported output formats		MPEG-2/H.262, MPEG-4/H.264 and HEVC/H.265	
MER		≥ 40 dB @ DVB-C ≥ 36 dB @ DVB-T	
BER		≥9x10-9	
Roll off		15 %	
Shoulder attenuation		≥ 56 dB	
C/N		≥45 dB	
Reflection		>14 dB	
Output bit rate, max		50,87 Mbps @ DVB-C 31,668 Mbps @ DVB-T	
FFT		2k mode @ DVB-T	
FEC		1/2, 2/3, 3/4, 5/6, 7/8 @ DVB-T	
Output guard interval		1/4, 1/8, 1/16, 1/32 @ DVB-T	
Output symbol rate		1...7,5 MBauds/s	
Interfaces			
Data interface IPTV input	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	2 × RJ45, IEEE 802.3, 1000 Base-T (GigE)
CAS / redundant IPTV interface	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	2 × RJ45, IEEE 802.3, 1000 Base-T (GigE)
Configuration / CAS interface	1 × RJ-45, IEEE 802.3, 10/100 Base-T	1 × RJ-45, IEEE 802.3, 10/100 Base-T	2 × RJ-45, IEEE 802.3, 10/100 Base-T
Supported configuration protocols		HTTP, SNMP v1, SNMP, v2c, AXING SMARTPortal**	
Software control and upgrading		Via Remote Access	
Common			
Operation voltage		100...240 VAC/50...60 Hz 48 VDC	
Power consumption	30 W	30 W	60 W
Redundant power supply		2 × Hot pluggable	
Equipotential bonding connection		4 mm2	
Operating temperature range (acc. to EN 60065)		-10°C...+50°C	
Storage temperature range (acc. to EN 60065)		-20 °C...+80 °C	
Dimensions (W × H × D) appr.		480 × 43 × 275 mm	
Comments		* available later	
SMARTPortal advantages:	The AXING SMARTPortal allows to connect any headend device to a cloud-based portal. When connected the customer has access to any device via the internet. The connection is password-saved and scrambled. The system will give the customer error messages to a dedicated e-mail address. Error messages occur in the following cases: <ul style="list-style-type: none"> ✓ Processor temperature > 90 °C ✓ Airflow temperature > 50 °C ✓ Modulator overflow ✓ Power supply failure ✓ Power supply temperature >85 °C ✓ Input stream overflow ✓ RF output-level not according to settings 		