

# CHP – Compact High Performance Headends

## IP to DVB-T2 – FFT up to 8 Kext | Max. bit rate 49.8 Mbps

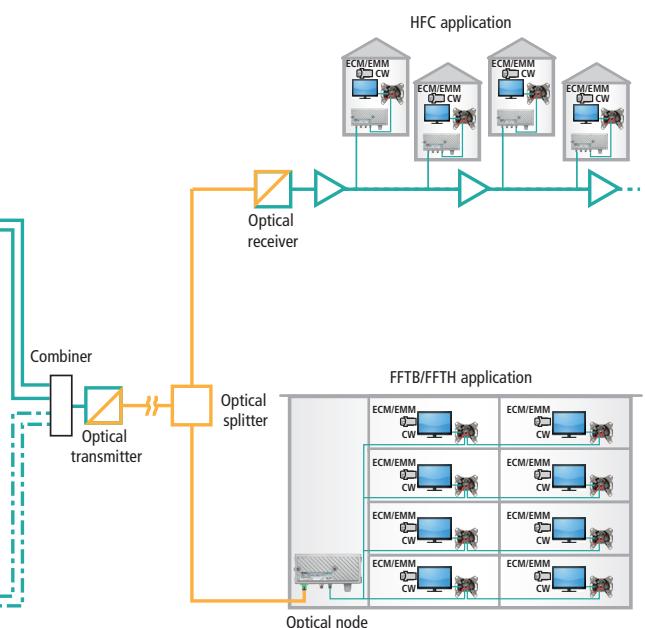
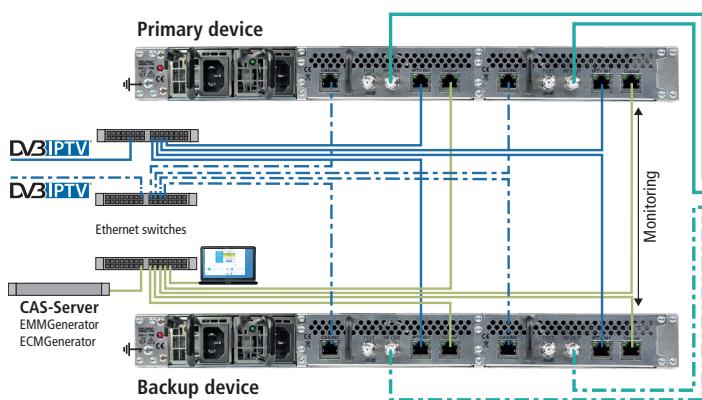
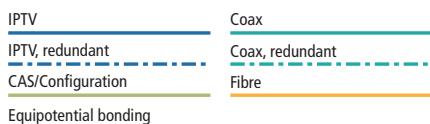
- ✓ Redundant IPTV inputs (900 Mbps)
- ✓ Supports SPTS and MPTS (also mixed)
- ✓ Re-Multiplexing
- ✓ PID filtering/ PID remapping
- ✓ Program duplication
- ✓ Output modulation DVB-T2 (EN 302 755)
- ✓ Web-based configuration
- ✓ Suitable for AXING SMARTPortal
- ✓ Supports SNMP
- ✓ 2 × redundant power supply units
- ✓ Device redundancy configurable\*
- ✓ OTA upgrade e.g. for Set Top Boxes possible
- ✓ Interface for CASimulcrypt Server\*

\* Software extension required



### Available devices:

MIE 3-02	Includes 1 module, transmodulates max. 512 input streams in 3 DVB-T2 output channels.
MIE 6-02	Includes 2 modules, transmodulates max. 2 × 512 input streams into 2 × 3 DVB-T2 output channels.
MIM 3-02	Extension module for MIE 3-02 for extension to 2 × 512 input streams and 2 × 3 DVB-T2 output channels.
MIS 1-11	Software extension for MIE device redundancy
MKS 1-02	Software extension for CASimulcrypt



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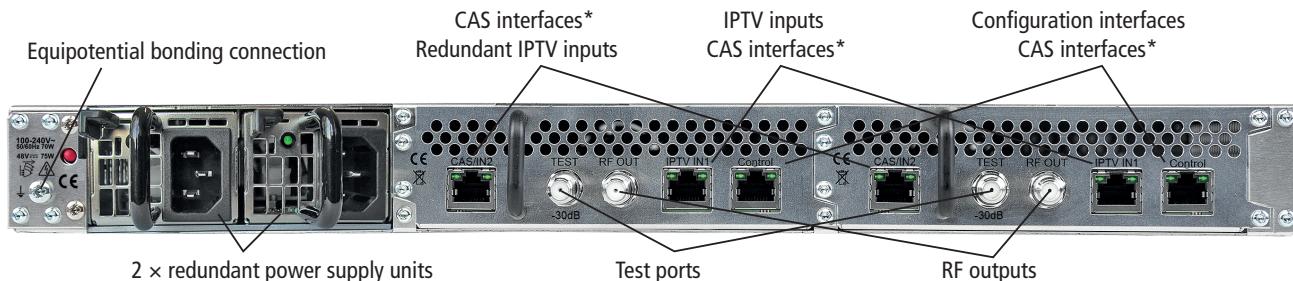
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# Technical data

## MIE 6-02 rear site



\* The ports CAS/IN2, IPTV IN1 and Control can be configured as the interface for the CAS server.

Type	MIE00302	MIE00602
<b>Input</b>		
Supported input transport streams	SPTS, MPTS (CBR/VBR)	
Max. number of input streams (out of SPTS or MPTS)	512	2 × 512
Supported protocols IPTV input	IP V4; UDP; RTP; IGMP v2, v3	
Total net data rate IPTV input	1 × 900 Mbps	2 × 900 Mbps
<b>Transport streams</b>		
Modifiable program information	Program name, SID remapping, PID filtering, TSID, ONID	
PCR correction	automatic adaptive PCR-correction, <500 ns	
L C N	Yes	
EPG regeneration	Yes	
Scrambling	DVB-CSA	
<b>Output</b>		
Number of output channels	1 × 3 × DVB-T2	2 × 3 × DVB-T2
Output frequency range	109...862 MHz	
Output channels adjustable	S2...K69	
Output channel bandwidth	7 MHz, 8 MHz	
Output net mode	MFN	
Possible frequency shift	-4...+4 MHz (0.5 MHz steps)	
Output connector	1 × F-female	2 × F-female
Output test port	1 × F-female (-30 dB)	2 × F-female (-30 dB)
Output impedance	75 Ω	
Output level adjustable	85...105 dBμV	
<b>Output modulation</b>		
Output compliance	EN 50083-9   ETSI TS 101 154   ETSI EN300 429   ETSI EN 300 744 DVB-T2* acc. to EN 302 755, mode A (single PLP)	
Modulation type	QPSK, QAM16, QAM64, QAM256	
L1 post signalling	BPSK, QPSK, 16QAM, 64QAM	
Supported output formats	MPEG-2/H.262, MPEG-4/H.264 and HEVC/H.265	
MER	≥ 43 dB	
BER	≥ 9x10-9	
Shoulder attenuation	≥ 56 dB	
C/N	≥ 45 dB	
Reflection	> 14 dB	
FFT	1K, 2K, 4K, 8K, 8Kext mode	
FEC type	BCH, LDPC	
FEC length	16200, 64800	
FEC	1/2, 3/5, 2/3, 3/4, 4/5, 5/6	
Pilot pattern	PP1...PP8	
Output guard interval	1/4, 19/128, 1/8, 19/256, 1/16, 1/32, 1/128	
Output bit rate	49.8 Mbps	
<b>Interfaces</b>		
Data interface IPTV input	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	2 x RJ45, IEEE 802.3, 1000 Base-T (GigE)
CAS / redundant IPTV interface	1 x RJ45, IEEE 802.3, 1000 Base-T (GigE)	2 x RJ45, IEEE 802.3, 1000 Base-T (GigE)
Configuration / CAS interface	1 x RJ-45, IEEE 802.3, 10/100 Base-T	2 x 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	
<b>Common</b>		
Operation voltage	100...240 VAC/50...60 Hz   48 VDC	
Power consumption	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 x 43 x 275 mm	
Comments	* switchable to DVB-T by license key ** encrypted, cloud-based application for configuration, monitoring and maintenance	

### 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:

- ✓ Processor temperature > 90 °C
- ✓ Airflow temperature > 50 °C
- ✓ Power supply failure/ Power supply temperature > 85 °C
- ✓ Input stream overflow
- ✓ Modulator overflow
- ✓ RF output-level not according to settings