

CHP - Compact High Performance Headends DVB/IPTV Hybrid Headend



- ✓ Future-proof thanks to hybrid technology
- ✓ Independent multituner inputs
- ✓ Transmodulates DVB-S/S2/S2X/T/T2/C into DVB-C/T or SPTS/MPTS (for IPTV software extension required)
- ✓ Optimized capacity management
- ✓ Remux | Crossmultiplex
- ✓ Decryption of encrypted program packages possible via CA modules (also high-speed modules)
- ✓ Flexible and efficient mapping of programs to CA modules
- ✓ Web-based configuration, remote maintenance (SMARTPortal)
- ✓ Supports SNMPv1 and SNMPv2c
- ✓ Can be used for wall mounting or as a 19" unit



Available devices:

MK 8-00I	8 × DVB-S/S2/S2X/T/T2/C into 8 × DVB-C/T or 512 × SPTS or 8 × MPTS
MK 8-06I	Like MK 8-00I, with 6 CI slots
MK 16-00I	16 × DVB-S/S2/S2X/T/T2/C into 16 × DVB-C/T or 512 × SPTS or 16 × MPTS
MK 16-06I	Like MK 16-00I, with 6 CI slots

Software extensions:

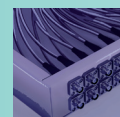
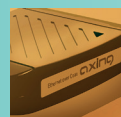
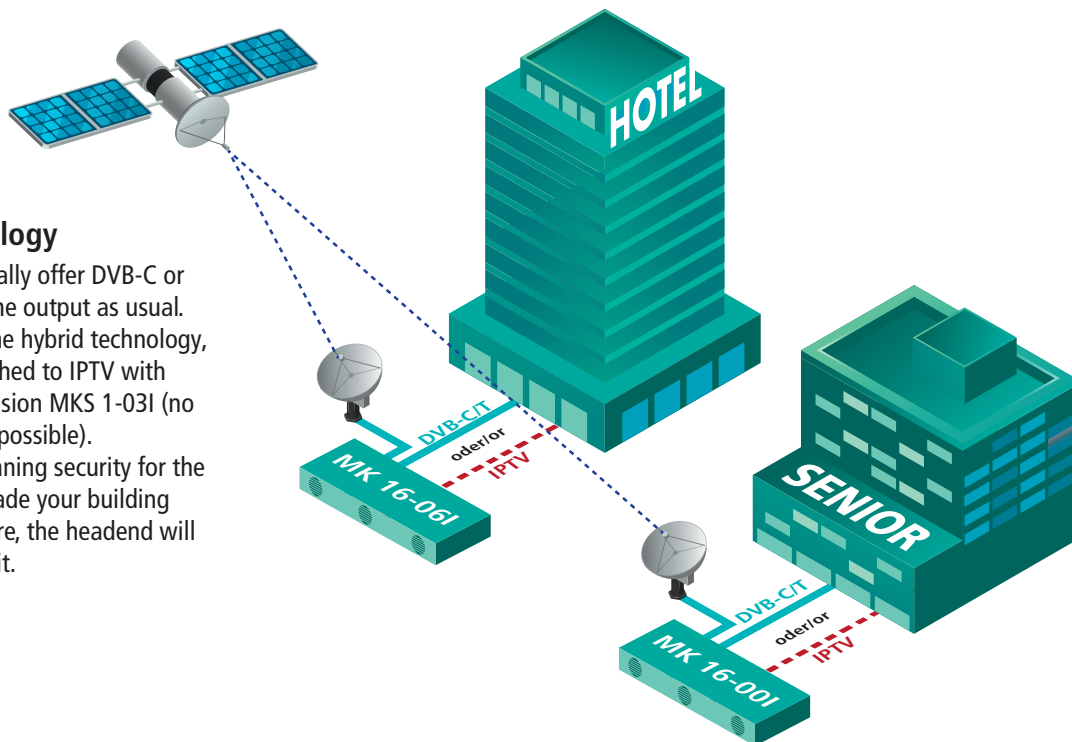
MKS 1-00	NIT functionality
MKS 1-01	PID filtering
MKS 1-02	CASimulcrypt
MKS 1-03I	IPTV output

Front panels:

MKZ 1-00	Front panel for 19" usage of MK 8/16-00I
MKZ 1-01	Front panel for 19" usage of MK 8/16-06I CI

Hybrid technology

The headends initially offer DVB-C or DVB-T signals at the output as usual. However, due to the hybrid technology, these can be switched to IPTV with the software extension MKS 1-03I (no parallel operation possible). This gives you planning security for the future. If you upgrade your building to IPTV in the future, the headend will simply move with it.



AXING AG

Gewerbehaus Moskau

Phone +41 52 - 742 83 00

Fax +41 52 - 742 83 19

8262 Ramsen

info@axing.com

www.axing.com

Type	MK 8-00I	MK 8-06I	MK 16-00I	MK 16-06I
Inputs				
Number of tuners	8 × DVB-S/S2/S2X/T/T2/C	8 × DVB-S/S2/S2X/T/T2/C	16 × DVB-S/S2/S2X/T/T2/C	16 × DVB-S/S2/S2X/T/T2/C
Connector	8 × F-female	8 × F-female	16 × F-female	16 × F-female
Frequency range		900 ... 2150 MHz @ DVB-S/S2/S2X 50 ... 898 MHz @ DVB-C 50 ... 898 MHz @ DVB-T/T2		
Channel bandwidth		5/6/7/8 MHz @ DVB-T/T2		
Input level		43 ... 84 dBμV @ DVB-S/S2/S2X 49 ... 84 dBμV @ DVB-C 39 ... 84 dBμV @ DVB-T/T2		
LNB voltage		13/17 V; 22 kHz on/off; DiSEqC 1.0		
Max. LNB current		250 mA per input 1000 mA per device		
CI slots	-	6	-	6
Input modulation				
Type		QPSK/8PSK/8APSK/16APSK/32APSK @ DVB-S/S2/S2X QAM16, QAM32, QAM64, QAM128, QAM256 @ DVB-C QPSK, QAM16, QAM64 @ DVB-T QPSK, QAM16, QAM64, QAM256 @ DVB-T2		
Compliance		DVB-S = EN 300 421 DVB-S2 = EN 302 307-1V1.4.1 DVB-S2X = EN 302 307-2V1.1.1 DVB-C = EN 300 429/ITU-TJ.83 Annex A/C DVB-T = EN 300 744 DVB-T2 = ETSI EN 302 755		
Supported input transport streams		MPEG-2 ISO/IEC 13818 MPEG-4 ISO/IEC 14496		
Error correction		auto		
Symbol rate		1.5 ... 45 MS/s (< 40 MS/s in 32APSK) @ DVB-S/S2/S2X 1 ... 7.2 Mbaud @ DVB-C		
Transportstreams				
Modifiable program information		Program name, SID remapping, PID remapping, PID filtering* TSID, ONID		
LCN		Yes		
NIT handling @ DVB-C		auto off manual*		
Encryption		DVB-CSA*, DVB-CISSA*, ATIS-IDSA*, AES-ECB*, AES-CBC*		
RF-Output				
Number of channels	8 × DVB-C/DVB-T	8 × DVB-C/DVB-T	16 × DVB-C/DVB-T	16 × DVB-C/DVB-T
Frequency range		109 ... 1006 MHz @ DVB-C 109 ... 862 MHz @ DVB-T		
Channels selectable		S2 ... K87 @ DVB-C S2 ... K69 @ DVB-T		
Channel bandwidth		7/8 MHz @ DVB-T		
Possible frequency shift		-4 ... +4 MHz (0.5 MHz steps)		
Connector		1 × F-female		
Test port		1 × F-female (-30 dB)		
Impedance		75 Ω		
Output level adjustable		80 ... 100 dBμV @ DVB-C 77 ... 98 dBμV @ DVB-T		
RF-Output modulation				
Compliance		DVB-T (EN 300 744) DVB-C (EN 300 429/ITU-TJ.83 Annex A/C)		
Type		QAM16, QAM32, QAM64, QAM128, QAM256 @ DVB-C QPSK, QAM16, QAM64 @ DVB-T		
MER		≥ 40 dB @ DVB-C ≥ 36 dB @ DVB-T		
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		
Guard interval		1/4, 1/8, 1/16, 1/32 @ DVB-T		
Symbol rate		1 ... 7.5 Mbaud/s @ DVB-C		
IP output*				
Transportstreams	512 × SPTS 8 × MPTS	512 × SPTS 8 × MPTS	512 × SPTS 16 × MPTS	512 × SPTS 16 × MPTS
Total net data rate		900 Mbps		
Data rate per tuner		125 Mbps		
Supported transport protocols		UDP		
Supported application protocols		RTP		
Interfaces				
Ethernet connectors (LAN)		2 × RJ 45		
Ethernet standards		IEEE 802.3, 100 Base-T @ Control IEEE 802.3, 1000 Base-T /1 GbE @ IPTV OUT		
Supported configuration protocols		HTTP, SNMP v1, SNMP v2c, AXING SMARTPortal**		
General				
Operating voltage		100 ... 240 VAC/50 ... 60 Hz		
Equipotential bonding connection		4 mm ²		
Operating temperature range (acc. to EN 60065)		-10 °C ... +50 °C		
Dimensions (W × H × D) appr.		480 × 253 × 47 mm		
Weight	2.550 kg	2.800 kg	2.900 kg	3.150 kg
Comments		* with software extension only ** encrypted, cloud-based application for configuration, monitoring and remote maintenance		