MK 12-03N DVB headend | 12 × DVB-S/S2/S2X into 12 × DVB-C/T | CI



- ✔ 12 independent tuner inputs
- ✔ Transmodulates 12 × DVB-S/S2/S2X into 12 × DVB-C or DVB-T
- ✔ Output modulation configurable
- ✔ 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
- ✔ NIT editing option (software extension required)
- ✔ PID Filtering (software extension required)
- ✔ Interface for CASimulcrypt Server (software extension required)
- ✔ Suitable for AXING FRAME EDGE (software extension required)
- ✔ Web-based configuration, remote maintenance (SMARTPortal)
- ✔ Supports SNMPv1 and SNMPv2c
- ✔ Can be used for wall mounting or as a 19" unit

Order information

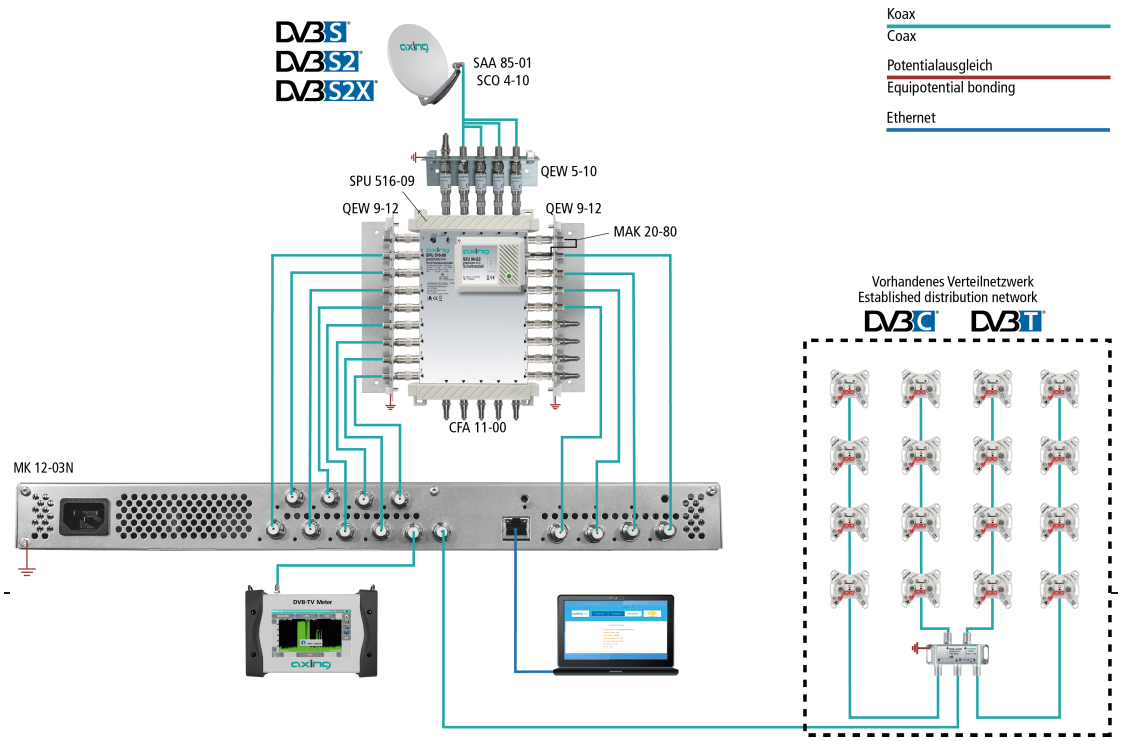
Type	MK 12-03N
Order no.	MK01203N
GTIN	7611682008494
PE	1
VE	1
EU customs tariff number	85256000

Technical data

Inputs	
Number of tuners	12 × DVB-S/S2/S2X
Connector	12 × F-female
Frequency range	900 … 2150 MHz @ DVB-S/S2/S2X
Input level	43 … 84 dBµV @ DVB-S/S2/S2X
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	3
Input modulation	
Type	QPSK/8PSK/8APSK/16APSK/32APSK @ DVB-S/S2/S2X
Compliance	DVB-S = EN 300 421 DVB-S2 = EN 302 307-1 v1.4.1 DVB-S2X = EN 302 307-2 v1.1.1
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)
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*
Output	
Number of channels	12 × 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
Impedance	75 Ω
Output level adjustable	75 … 95 dBµV @ DVB-C/DVB-T
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
Interfaces	
Ethernet connectors	1 × RJ 45
Ethernet standards	IEEE 802.3, 100 Base-T
Supported configuration protocols	HTTP, SNMP v1, SNMP v2c, AXING SMARTPortal**
General	
Operating temperature range (acc. to EN 60065)	–10°C…+50°C
Operating voltage	100 … 240 VAC/50 … 60 Hz
Power consumption	60 W
Equipotential bonding connection	4 mm²
Dimensions (W × H × D) appr.	436 × 253 × 47 mm
Weight	3.000 kg
Comments	* with software extension only ** encrypted, cloud-based application for configuration, monitoring and remote maintenance

Example of use



Suitable products

MKZ 1-03 Front panel for 19" usage | 3 × CI
MKS 1-00 Software extension to edit a NIT
MKS 1-01 Software extension for PID filtering
MKS 1-02 Software extension for CASimulcrypt
MKS 12-16 Software extension from 12 to 16 output modulators