

## MK 16-00H Hybrid dual headend | FTA



- ✓ 16 independent multituner inputs
- ✓ Transmodulates 16 × DVB-S/S2/S2X/T/T2/C into 16 × DVB-C/-T and 512 × SPTS (for SPTS a software extension is required)
- ✓ Single cable reception I and II possible
- ✓ Simultaneous RF/IP output possible
- ✓ Future-proof for the gradual technology change to IP
- ✓ Optimized capacity management
- ✓ Remux | Crossmultiplex
- ✓ 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 16-00H     |
| Order no.                | MK01600H      |
| GTIN                     | 7611682400359 |
| PE                       | 1             |
| VE                       | 1             |
| EU customs tariff number | 85256000      |



## Technical data

|                                   |                                                                                                                                                                               |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inputs                            |                                                                                                                                                                               |
| Number of tuners                  | 16 × DVB-S/S2/S2X/T/T2/C                                                                                                                                                      |
| Connector                         | 16 × F-female                                                                                                                                                                 |
| Frequency range                   | 900 ... 2150 MHz @ DVB-S/S2/S2X<br>50 ... 898 MHz @ DVB-C<br>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<br>49 ... 84 dBμV @ DVB-C<br>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<br>1000 mA per device                                                                                                                                        |
| Input modulation                  |                                                                                                                                                                               |
| Type                              | QPSK/8PSK/16PSK/32APSK @ DVB-S/S2/S2X<br>QAM16, QAM32, QAM64, QAM128, QAM256 @ DVB-C<br>QPSK, QAM16, QAM64 @ DVB-T<br>QPSK, QAM16, QAM64, QAM256 @ DVB-T2                     |
| Compliance                        | DVB-S = EN 300 421<br>DVB-S2 = EN 302 307-1V1.4.1<br>DVB-S2X = EN 302 307-2V1.1.1<br>DVB-C = EN 300 429/ITU-TJ.83 Annex A/C<br>DVB-T = EN 300 744<br>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<br>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*                                                                                                                          |
| Output                            |                                                                                                                                                                               |
| Number of channels                | 16 × DVB-C/DVB-T                                                                                                                                                              |
| Frequency range                   | 109 ... 1006 MHz @ DVB-C<br>109 ... 862 MHz @ DVB-T                                                                                                                           |
| Channels selectable               | S2 ... K87 @ DVB-C<br>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<br>77 ... 98 dBμV @ DVB-T                                                                            |
| Output modulation                              |                                                                                                                              |
| Compliance                                     | DVB-T (EN 300 744)<br>DVB-C (EN 300 429/ITU-TJ.83 Annex A/C)                                                                 |
| Type                                           | QAM16, QAM32, QAM64, QAM128, QAM256 @ DVB-C<br>QPSK, QAM16, QAM64 @ DVB-T                                                    |
| MER                                            | ≥ 40 dB @ DVB-C<br>≥ 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   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                            | 2 × RJ 45                                                                                                                    |
| Ethernet standards                             | IEEE 802.3, 100 Base-T @ Control<br>IEEE 802.3, 1000 Base-T /1 GbE @ IPTV OUT                                                |
| 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                              | 70 W                                                                                                                         |
| Equipotential bonding connection               | 4 mm²                                                                                                                        |
| Dimensions (W × H × D) appr.                   | 480 × 253 × 47 mm                                                                                                            |
| Weight                                         | 3.350 kg                                                                                                                     |
| Comments                                       | * with software extension only<br>** encrypted, cloud-based application for configuration, monitoring and remote maintenance |

## Suitable products

[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 1-03H Software extension for IPTV output](#)

[MKZ 1-00 Front panel for 19" usage](#)

[HKM 40-02H 4-way HDMI to DVB-C/T/IPTV encoder/modulator](#)

[UIM 20-05H Universal IP Modulator DVB-C/T/IPTV | 20 in 5](#)