

GOING FUTURE TODAY.



## Compact headend

SAT to QAM

6 Common Interface Slots

 Made in  
Germany



CI BOX 16

Direct Digital  by ASTRO

### Inputs:

- 16x SAT (DVB-S/S2)

### Outputs:

- 16x QAM

### Further features:

- 6 Common Interface Slots
- Unicable-/JESS control
- Service and Drop Filter
- 2 Management ports
- SD card for saving config data
- 19 inch, 2 HU
- Rack or wall mounting
- License: Multiplexing
- License: TLS on/off
- License: Common Scrambling

Type		CI BOX 16
Order number		380 063
EAN-Code		4026187280635
Network Interfaces		
Management		2x 1000 Base-T Ethernet (RJ 45) (10, 100, 1000)
Data		2x SFP (1000 Base-X or SGMII) (optional)
Bitrate per data port		1000/1000/1000/750 @ 1/2 Ports
Protocols		Ethernet, ARP, IPv4, IPv6, VLAN, UDP, RTP, TCP, HTTP(S), SNMP, SNMP v2c/v3, Syslog, IGMP v2/v3, MLD v1/v2
SAT-IF Interface		
Type of Interface	Ω	4 x Coaxial, 75
Reflection loss	dB	10, typical
Remote supply voltage	V	13.0 - 20.3
Remote supply current	mA	max. 400 (per input)
Demodulator		
Frequency range	MHz	950 – 2150
Standards		DVB-S, DVB-S2(X)
Input symbol rate DVB-S	MS/s	1,0 - 54
Input symbol rate DVB-S2(X)	MS/s	min: 2,0
		<b>Actice RX:</b> 1-16 1-4, 9-12 1-4*
		QPSK 45 64 70
		8PSK 29 46 70
		16APSK 22 35 70
		32APSK 17,5 28 56
		64APSK 14,5 25 46
		128APSK 12,5 23 40
256APSK 11,0 21 35		
Input level	dBμV	60 – 90 (32 channels)
CI Interfaces		
CI Slots		6x (front access)
CI data rate	MBit/s	70
Supported modules		Al Jazeera Sports, Alphacrypt, Aston, Conax, Cryptoworks, Diablo, Dragon, Dreamcrypt, Entavio CAM, Free-X TV, Giga, GkWare BISS CAM, Homecast CAM, ICECrypt, Irdeto Access, Joker, Kid CAM, Magic Module, Mascom Cryptoworks, Matrix CAM, Mediaguard Canal Digital, Nagravision, Oasis CAM, PCMCIA Cam, PowerCam Pro, Premiere Worldcam, T-Rex Twin Module, TechniCAM Beta2, Technicrypt, TPS, Reality CAM, SMIT, Ultimate CAM, Universal CAM, Viaccess, Videoguard CAM, X-Cam, Zetacam Blue
Connections		6x PCMCIA
Transportstream processing		
TS Decapsulation		UDP, UDP/RTP, 1 - 7 packets, FEC (SMPT E 2022-1, -2)
Packet length		188 Bytes
Data rate adjustment		<input checked="" type="checkbox"/>
PCR correction		<input checked="" type="checkbox"/> (< 500 ns accord. DVB)
NIT handling		static, NIT out of PID, dynamic
QAM Modulator		
Modulation		16-, 32-, 64-, 128-, 256-QAM
Signal processing		DVB EN 300 429, ITU J.83 A/C
Spectrum shaping		cos-roll-off (12%, 13%, 15%, 18%)
FEC		Reed-Solomon (204,188)-Code
Symbol rate	Msym/s	1 - 7,14
Bandwidth	MHz	1,12 - 8 (depends on symbol rate)
Max. number of output channels		16
Max. bit rate per output channel	Mbit/s	52,64
Phase error dynamic		< 0,3°
MER (EQ)	dB	≥ 44
Shoulder attenuation	dB	> 56
RF Modulator		
Connectors		2x F-jack 75 Ω (1x RF, 1x Testpoint -20 dB)
Frequency range	MHz	47 - 1006, digitally modulated
Frequency deviation	kHz	< 10
Output level	dBμV	96 @ 16 channels
Common data		
Power consumption	W	typical 50, max. < 75
Input voltage	V	230
Dimensions (W x H x D)	mm	without mounting brackets: 19 Zoll, 2HU; 422 x 86,5 x 220 with mounting brackets: 480,6 x 87 x 220
Installation height / Operating height	m	≤ 2000 N.N.
Ambient temperature	°C	0 ... +45