



DVB-C/T/T2 to IP Streamer



SPTS + MPTS
Multiplexing
Descrambling



U 164-X

Backplane:



Direct Digital 
by ASTRO

- plug-in module for U 100 base unit
- for processing of 4 DVB-C/T/T2 signals into IP multicast groups, 8 (4 FTA and SCR each) MPTS, 504 SPTS, SPTS license afforded
- **multiplexing of four input transponders to four output streams (license afforded)**
- up to 12 streams per rack unit, 4 CI slots with multichannel descrambling
- fully intergrated to U 100 head-end system
- easy configuration and maintenance via webbrowser
- monitored fan

License	Ord.nr.	Description	
U SSL	380 133	To enable the SSL function activating the TLS protocol (SSL) for encrypted communication via https	☒
U Radius	380 136	For unlocking the RADIUS client-server-protocol	☒
U SPTS	380 146	To enable the SPTS streaming function	☒
U 149 SPTS	380 153	U 149-X license to enable the SPTS streaming function	-
U Streamer MUX	380 147	For upgrading the Multiplex function in the frontend; EIT-calculation for the new output signals	1 x 4 in 4
U Carrier Monitoring	380 132	For unlocking the monitoring function; in case of deviating input signals from a reference value, the switch-off of the corresponding IP Tx is executed, ideal solution for IP-based satellite monitoring systems	-
U Blindscan	380 135	For unlocking the Blind Scan function; the streamer recognizes missing, additional and changed transponders after a reference scan of the spectrum; configurable scan range (frequency and symbol rate)	-
U Streamer BISS	380 134	For unlocking the BISS function of U 100 streamer modules	☒
U Wideband Mode	380 156	For unlocking wideband mode; reception of DVB-S2X transponders with max. data rate of 200 Mbit/s	-

Type		U 164-X	
Order number		380 167	
EAN-Code		4026187194499	
Number of DVB-CT2 input signals		4	
Number of DVB-CT2 tuners		8	
Number of IP output streams		8 MPTS (4 FTA and SCR each), 504 SPTS	
Interfaces			
Management		2 x 100 Base-T Ethernet (RJ 45)	
Data		2 x 1000 Base-T Ethernet (RJ 45)	
Protocols		IEEE802.3 Ethernet, RTP, ARP, IPv4, TCP/UDP, HTTP, SNMP, IGMPv3	
Transportstream Encapsulation			
Protocols		UDP, UDP / RTP, 1-7 packets, FEC	
Packet length	[Bytes]	188 / 204	
DVB-C demodulator			
Frequency range	[MHz]	47 - 862	
Input data rate	[Mbaud]	0,5 - 7	
Modulation modes (accord. DVB-standard)		QPSK, QAM16, QAM32, QAM64, QAM128, QAM256	
Input symbol rate	[MS/s]	1,8 - 7,2	
DVB-T demodulator / DVB-T2 demodulator (Scrambling of L1 post signalling; conforms to ETSI EN 302-755 v1.31)			
Frequency range	[MHz]	47 - 862	
Modulation		DVB-T: 4-, 16-, 64-QAM; DVB-T2: 4-, 16-, 64-, 256-QAM DVB-T2 scrambling of L1 post signalling	
Guardinterval		DVB-T: 1/4; 1/8; 1/16; 1/32; DVB-T2: 1/4; 5/32; 1/8; 5/64; 1/16; 1/32; 1/64; 1/128	
FEC		DVB-T: 1/2; 2/3; 3/4; 5/6; 7/8; DVB-T2: 1/2; 3/5; 2/3; 3/4; 4/5; 5/6	
FFT-Mode		DVB-T: 2k, 8k; DVB-T2: 1k, 2k, 4k, 8k, 16k, 32k	
Bandwidth	[MHz]	DVB-T: 6; 7; 8; DVB-T2: 5; 6; 7; 8	
Remote vdtage supply		5V, typical, 100mA, switchable	
Input symbol rate	[MS/s]	DVB-T: 6, 7, 8; DVB-T2: 5, 6, 7, 8	
CI interfaces			
CI slots		4 x (front access)	
Supported modules	excerpt (others on request)	Alphacrypt, Aston Conax, Dreamcrypt, Entavio CAM, GkWare BISS CAM, Homecast CAM, ICEcrypt, Ideto Access, Kid CAM, Mascom Cryptoworks, Matrix CAM, Mediaguard Canal Digital, Nagravision, Oasis CAM, PCMCIA CAM, Premiere, Worldcam, TechniCam Beta2, Technicrypt, TPS, Reality CAM, SMIT, Universal CAM, Viaccess, Videoguard CAM	
Connectors		4 x PCMCIA	
RF inputs			
Connectors	[Ω]	75, 4 x F-jack	
Common data			
Current consumption at 48 V	[mA]	590	
Power consumption at 36 - 60 V	[W]	28,5 per module	
Input voltage	[V]	36 - 60	
Dimensions		1 HU, 19 inch	
Ambient temperature	[°C]	0 ... +45	