



# TRIAX

connecting the future

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TDcH Compact Headend 22STC-I

Art. Number 492782





## TDcH Compact Headend with CI Interfaces

DVB-S, DVB-S2, DVB-T, DVB-T2 and DVB-C conversion to QAM or COFDM (switchable) with the possibility to decrypt services centrally in the headend.

Built for both wall mounting and 19" racks and equipped with 4 DVB-S/S2 inputs, 1 DVB-T/T2/C input, 16 DVB-S2X tuners, 6 DVB-T/T2/C tuners, 16 QAM or COFDM (switchable) modulators and 8 CI slots.

The TDcH compact headend is optimised and engineered to meet specific TV distribution requirements in hospitality, multi-dwelling units and related sectors with an appealing, competitive cost per service ratio.

Our brand new, intuitive platform smoothly integrates easy installation, an elegant graphical user interface, central decryption, remote access, and straightforward TV service updates with LCN.

### Features

- 4 x SAT IF inputs with integrated multiswitch
- 1 x Terr / Cable input with integrated splitter
- 16 x DVB-S2 tuners
- 6 x DVB-T/T2/C tuners
- 8 x CI interfaces
- 16 x QAM or COFDM full band modulators
  - Electronically adjustable output level
  - Suitable for adjacent channels
  - Symbol rates and modulation individually adjustable
- Multiplexing & IP pool
  - TV-Service Multiplexing from all inputs at each output transponder to optimize available bandwidth
  - TV-Service Multiplexing at the CA-modules to reduce amount of CAM's
- Integrated Satellite Channel Router (SCR) multiswitch\*
  - Reception of up to 4 satellite positions with each 2 polarizations and 2 frequency bands
- Transport Stream Processing
  - Network Information Table (NIT) for complete headend station
  - LCN (Logical Channel Numbering)
- SID, TSID and ONID management
  - To handle conflicts during multiplexing
  - To handle changes if required
- PID management
  - To handle PID conflicts
  - PID filtering to reduce audio channels from a TV service
  - Distribute TV services multiple times with different languages
  - In case of service changes to secure no new TV channel tune
- EPG management
  - To manage the amount of EPG-data distributed in an output transponder
  - To support TVs with EPG data from all TV services without the need of retuning all transponders
- Service Filtering with the option for
  - Remove unwanted services
  - Remove services for minimize data rate-
- Real time output load measurement
- Dashboard
  - System information and overview without login
- HTML user interface via self-signed HTTPS

## Technical Specifications

### ORDER INFORMATION



## Technical Specifications

EAN Number 5702664927826

### CHARACTERISTICS

Demodulator Type	DVB-S2X
Demodulator Symbolrate   Msym/s	1...45 Msym/s
Input level   dB $\mu$ V	44 – 90 dB $\mu$ V dB $\mu$ V
LNB current max.   mA	400 mA
LNB V/H programmable   V/mA	13/18 V/mA
LNB LO/Hi programmable   kHz	22 kHz
DiSEqC level	1.0
FFT mode DVB-T	2k, 8k
FFT mode DVB-T2	1k, 2k, 4k, 8k, 16k, 32k
Constellations DVB-T	QPSK, 16QAM, 64QAM
Constellations DVB-T2	QPSK, 16QAM, 64QAM, 256QAM
Code rates DVB-T	1/2, 2/3, 3/4, 5/6, 7/8
Code rates DVB-T2	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Guard Interval DVB-T	1/4, 1/8, 1/16, 1/32
Guard interval DVB-T2	1/4, 19/128, 1/8, 19/256, 1/16, 1/32, 1/128
Output Type	QAM/COFDM
Output QAM Modes	16, 32, 64, 128, 256
Output level adjustment   dB	10 dB
Output Level System   dB $\mu$ V	QAM 95 / COFDM 93 dB $\mu$ V
Output symbol rate   Mbit/s	3,5...7,2 Mbit/s
Spurious Signals   dB	> 60dB dB
MER   dB	QAM>43 / COFDM>40 dB
Cable - symbol rate   Mbit/s	3.5...7.2 Mbit/s
Demodulator Viterbi Decoder	1/2; 2/3; 3/4; 5/6; 7/8; automatically / manually
DVB-S2 Modes (8PSK)	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
DVB-S2 Modes (QPSK)	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
DVB-S Modes (QPSK)	1/2, 2/3, 3/4, 5/6, 7/8
LNB band selection	DiSEqC 1.0 Control 13/18VDC and 22kHz
Max. Output level (@ full dig. load)   dB $\mu$ V	QAM 95 / COFDM 93 dB $\mu$ V
Modulation scheme	QAM 16, 32, 64, 128, 256
Output channel	S 21 – C 69
Output level   dB $\mu$ V	QAM 85...95 / COFDM 83...93 dB $\mu$ V
Satellite - demodulation	QPSK; 8PSK
Satellite transponders	16
Symbol rate DVB-S (QPSK)   Mbit/s	1...45 Mbit/s
Symbol rate DVB-S2 (8PSK)   Mbit/s	4.5...45 Mbit/s
Symbol rate DVB-S2 (QPSK)   Mbit/s	4.5...45 Mbit/s
Viterbi decoder	1/2; 2/3; 3/4; 5/6; 7/8; automatically / manually



## Technical Specifications

Test Point   dB	-20 dB
Supported CAM Vendors	Aston, Neotion, SMARDTV, SMiT
Supported modules and cards	Conax: Canal Digital (Nordic), Telewizja (PL), T Home (HU) Cryptoworks: ORF (AT), UPC Direct (HU) Irdeto: ORF (AT) Nagravision: Canal Digital (NL), Canal+ (FR), Cyfra (PL), Cyfrowy (PL), Multicanal (ES), UPC, NDS, Viasat (Nordic + Baltic) Viaccess: Canal+ (FR), Eurosport (PL)
Transport stream	chip set prepared but not supported with SW1.0
<b>FREQUENCY RANGE</b>	
Input frequency range   MHz	950...2150 MHz
Output frequency range   MHz	306...862 MHz
Channel Raster   MHz	8 MHz
Channels	S 21 – C 69
Number of channels	16 channels in a row, single channel can be switched off
Satellite - frequency range   MHz	950...2150 MHz
<b>RETURN LOSS</b>	
Output Return Loss   dB	>10 dB
Return loss SAT inputs   dB	> 10 dB
Return loss (RF OUT)   dB	> 10 dB
<b>ELECTRICAL</b>	
Number of RF outputs	1
<b>OPERATIONAL</b>	
CI slots	8 x PCMCIA (front access)
Data rate	83 Mbit/s
Ethernet Interface	2 x 1000 Base-T (RJ 45)
DC Supply Voltage   VDC	5 VDC
<b>CONNECTORS</b>	
Connector IN	F connector
Input Type	SAT-IF
Output connector	F connector
Connector - SFP cage	1 x 1000 Base-T (SFP)
Connector SAT	4 x F connector, 75 Ohm, 400 mA per input LNB power feed
Connector USB	USB 2.0, Type A con (Data transfer, additional storage, ...)
External RF OUT	1 x F connector 75 Ohm
Output connectors	1 x F connector 75 Ohm
Output connectors (for RF)	1 x F connector, 75 Ohm
Connector SAT-IF	4 x F connector, 75 Ohm, 400 mA per input LNB power feed
SFP cage	1 x 1000 Base-T (SFP)

