

## **TDmH Mini Headend – 14 STC with CI - Pro:Idiom (LG) Included**

**Article No.492776**



### TDmH Mini Headend

Built on the same cutting-edge and well-tested software platform used for TDcH, but with reduced functionality to meet the requirements for an entry-level headend. Complimentary updated software offers new and existing customers additional functions, benefits, and powerful hardware configurations to match your requirements.

#### Compact excellence

- Exquisite engineering, finely tuned for perfect performance
- Your natural choice for swift, efficient TV distribution
- Save time and costs, with fast, easy installation and remote management
- Compact design fits elegantly into 19" racks or as a wall mount unit
- Reliable, innovative headend expertise from TRIAX

#### Smooth integration

- Optimised channel setup with advanced multiplexing and Service Pool technology
- Integrated SCR multiswitch for cost, time and space saving
- No need for retuning TV sets in rooms thanks to SID and PID Management
- EPG Management ensures full Electronic Program Information (EPG) for better user experience
- Central decryption with CI slots, Free-To-Air version available
- Option for scrambling of premium services, supporting scrambling of Philips and LG TV sets. Upcoming supporting scrambling for Samsung TV sets
- Multiple language service allows for multiple distribution of a service with different audio (language) tracks
- IP-in and IP-out for receiving and streaming services. Possibility for simultaneous IP-in and IP-out through the same interface with optional VLAN tags for separating the in and out streams

#### Integrated SCR Multiswitch

- Increases the number of satellite positions that can be received in the TDcH/TDmH
- Increases the number of international TV services that can be distributed
- Save time, cost and space with less cabling and no need for an external multiswitch
- Reduced hardware for a cost optimised and compact solution

#### Service Pool and Multiplex technology

- 8 DVB-S/S2/S2X and 6 DVB-T/T2/C input signals
- 8 QAM or COFDM full band modulators (switchable)
- 48 IP-in SPTS and MPTS UDP/RTP (license required)
- 48 IP-out SPTS UDP/RTP (license required)
- 4 x CI interfaces for CAM
- Scrambling VSecure (Philips) / (licence required - 418756)



- Scrambling Pro:Idiom (LG) / (special variant and licence required - 492776)
- Multiplexing at both RF output, IP output, scrambler and CAM (CI interface)
- Optimised service line-up within the available input and output modules
- More relevant TV services due to service multiplexing

#### Pro:Idiom (LG) included

- Encrypts the signals sent to LG hospitality TVs, safeguarding against the unauthorized reproduction of copyright content from TV channels
- Scrambling up to 24 services for LG Hospitality TVs
- Protection of the premium contents

#### Energy saving – long-term reliability

- Low power consumption
- Temperature controlled cooling system with integrated fans - increases the service life of the equipment
- The cooling system supports 19" rack mounting as well as wall mounting

Item Name:		TDmH 14STC-I Pro:Idiom (LG) Included
Art No:		492776
EAN Number	-	5061038081558
<b>INTERFACES</b>		
Management Interface	-	1 x 1000 Base-T (RJ 45, Port 1)
SimulCrypt / DRM	-	1 x 1000 Base-T (RJ 45, Port 2) not supported with current software release
Ip-in and –out	-	1 x 1000 Base-T (SFP)
CI Slots	-	4 x PCMCIA (front access)
<b>DVB-S2X input</b>		
Satellite inputs	-	4 x F connectors, 75 Ω, 400 mA per input LNB power feed
Number of transponders	-	8
Frequency range	MHz	950 - 2150
Level range	dBμV	44 - 90
Return loss	dB	>10
DVB-S modulation	-	QPSK; 8PSK (16APSK and 32APSK will be supported in later SW version)
Max. data rate / tuner	Mbit/s	83
Input selection	-	DiSEqC 1.0 Control 13/18VDC, 22kHz and SCR via JESS (EN 50607:2015)
<b>DVB-T/T2/C input</b>		
Terrestrial / Cable input	-	1 x F connector, 75 Ω
Tuners	-	6
Input frequency range	MHz	47 - 862
Channel bandwidth	MHz	7/8
Level range	dBμV	40 - 95
Input noise	dB	<7
Return loss	dB	>10



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<b>DVB-T</b>		
Demodulator type	-	COFDM
Modulation DVB-T	-	QPSK, 16QAM, 64QAM
<b>DVB-T2</b>		
Demodulator type	-	COFDM
Modulation DVB-T2	-	QPSK, 16QAM, 64QAM, 256QAM
<b>DVB-C</b>		
Demodulator type	-	QAM
Modulation DVB-T2	-	16QAM, 64QAM, 128QAM, 256QAM
<b>IP-Input</b>		
Number of IP input streams	-	4, 16 or 48 x SPTS/MPTS (license required)
Data interface	-	1 x 1000 Base-T SFP or Fibre SFP ; 1000BaseX (SerDes) mode
Protocols	-	IEEE802.3 Ethernet, IEEE802.1Q VLAN, IGMPv2, IGMPv3, SPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT, MPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT, Multicast UDP and RTP MPEG Transport Stream via IP Protocol
IP packet format	-	MPEG
IP-Bitrate	-	max. 950 Mbit/s at SFP interface for all SPTS streams
<b>CI interfaces</b>		
Bitrate	Mbps	Configurable: 50, 72, 96
PID and service limit	-	PID and service limit is given by the CAM
Supply voltage	V	5
<b>RF output</b>		
RF out	-	1 x F connector
HF measuring output	-	1 x F connector, -20 dB
Frequency range	MHz	306 – 862
Channels	-	S 21 – C 69
Channel settings	-	8 channels in a row, single channels can be switched off
Return loss	dB	> 10
Output impedance	$\Omega$	75
<b>QAM modulation</b>		
Output level range	dB $\mu$ V	85 – 95
Modulation scheme	-	QAM 16, 32, 64, 128, 256
Dynamic phase error	-	< 0.3
MER	dB	> 43
Symbol rate	MS/s	3.5 – 7.2
MER	dB	>=40
Output mode:	-	2k
Guard intervals:	-	1/4, 1/8, 1/16, 1/32



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COFDM modulation		
Output level range	dB $\mu$ V	83 – 93
Carrier to spurious ratio:	dB	> 60
Modulation scheme:	-	QPSK, 16 QAM, 64 QAM
MER	dB	>=40
Output mode:	-	2k
Guard intervals:	-	1/4, 1/8, 1/16, 1/32
IPTV Output		
Number of IP output streams	-	48 x SPTS (license required)
Data interface	-	1 x 1000 Base-T SFP or Fibre SFP ; 1000BaseX (SerDes) mode
Protocols	-	IEEE802.3 Ethernet, IEEE802.1Q VLAN, SPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT, Multicast UDP and RTP MPEG Transport Stream via IP Protocol, 7 TS packets pr. Ethernet packet
IP packet format	-	MPEG
IP-Bitrate	-	max. 950 Mbit/s at SFP interface for all SPTS streams
PID-Filtering and Remapping	-	Yes
TTL	-	1-255 (default 16)
EIT	-	Inside SPTS for current service
XML EPG	-	EPG data in XML format as specified by Samsung
		Configurable language and Maturity Rating Country for XML EPG
Scrambling		
VSecure (Philips) (Philips TV + special CAM)		Licence required 48 x
Pro:Idiom (LG) (special hardware)		24 x
LYNK (Samsung)		Licence required (future) 48 x
Simulcrypt (128bit AES)		Licence required (future) 48 x
Features		
SNMP	-	SNMP traps (license required)
General		
Mains supply	-	100 - 264 V AC, 50/60 Hz
Ground connection	-	Ground clamp
Power consumption	W	typ. *40
* Without CAM and LNB power	W	max. 80
Ambient temperature	°C	-10 to +50
Dimensions (W x D x H)	mm	434 x 168 x 45
Net Weight	kg	3.1