



## **TDmH Mini Headend – 8S with CI – Pro:Idiom (LG) Included**

**Article No.492775**



### 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 - 492775)
- 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 8S-I Pro:Idiom (LG) Included  |
|----------------------------|--------|--|
| Art No:                    |        | 492775   |
| EAN Number                 | -      | 5061038081541  |
| <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>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<br>SPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT, MPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT,<br>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  |



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|-----------------------------|------------|---|
| CI interfaces               |            |   |
| Bitrate                     | Mbps       | Configurable: 50, 72, 96  |
| PID and service limit       | -          | PID and service limit is given by the CAM   |
| Supply voltage              | V          | 5   |
| RF output                   |            |   |
| 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  |
| QAM modulation              |            |   |
| 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   |
| 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<br>SPTS Streaming (VBR) including PAT, SDT, PMT, CAT and EIT, Multicast<br>UDP and RTP MPEG Transport Stream via IP Protocol, 7 TS packets pr.<br>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<br>Configurable language and Maturity Rating Country for XML EPG   |



| Item Name:                                      |    | TDMH 8S-I Pro:Idiom (LG) Included |
|---|----|-----------------------------------|
| <b>Scrambling</b>                               |    |                                   |
| VSecure (Philips)<br>(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    |
| <b>Features</b>                                 |    |                                   |
| SNMP  | -  | SNMP traps (license required)     |
| <b>General</b>                                  |    |                                   |
| Mains supply                                    | -  | 100 - 264 V AC, 50/60 Hz          |
| Ground connection                               | -  | Ground clamp                      |
| Power consumption                               | W  | typ. *33                          |
| * Without CAM and LNB power                     | W  | max. 73                           |
| Ambient temperature                             | °C | -10 to +50                        |
| Dimensions (W x D x H)                          | mm | 434 x 168 x 45                    |
| Net Weight                                      | kg | 3.0                               |