



Connecting past, present and future.



Solutions with tangram



Channel Processing

Headends for residential, regional and national networks.



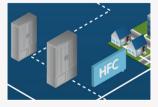
RF Overlay

Solutions for video services in GPON and active Ethernet networks.



Housing Industry

Headends for housing complexes, hotels and hospitals.



HFC

From the Headend to the wall-outlet: Everything for the cable network.

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Chassis Overview

The TANGRAM base unit is a 1 RU chassis which can fit up to 6 modules on the backside and 1 module on the front panel. It comes with an embedded switch on the backplane (GT01W, GT11) and a hot swappable fan tray. The GT01W is a carrier grade chassis and supports a fully redundant concept (1+1, n+1).



- 1 Easy configuration of the complete platform via 1 management port
- 2 Minimized effort for cabling and management configuration by internal switch

- Expandability for increasing bandwidth and port redundancy by GigE SFP GT12 extension (+4 GigE)
- 4x GigE interface individually configurable for streaming bandwidth distribution



- Connect your engineer
 Additional management
 port for local connection
- 2 Flexible Installation
 Any module in any slot

- High reliability by redundant AC and DC power supply
- 4 Hot swappable fan tray

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Chassis







GT01W0230

19" 1 RU chassis with backplane, 1 power supply (230 VAC), fan tray and integrated GigE switch (GT11)

GT01W0110

19" 1 RU chassis with backplane, 1 power supply (110 VAC), fan tray and integrated GigE switch (GT11)

GT01W0048

19" 1 RU chassis with backplane, 1 power supply (48 VDC), fan tray and integrated GigE switch (GTI1)

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Power Supplies







GT55W0230

GT55W0110

GT55W0048

Redundant PSU 230V AC for GT01W

Redundant PSU 110V AC for GT01W

Redundant PSU 48V DC for GT01W

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Input & Encoder Modules

The TANGRAM modules are the pieces of the puzzle that you combine to create your professional video headend solution.







DVB-Gateway

- Multi transport stream reception for DVB signals
- ✓ Up to 4 DVB-S/S2/S2X/C/T/T2/ ISDB-T RF inputs
- ✓ DVB/ARIB transport stream processing
- ✓ RTP/ IP FEC output stream protection
- Demultiplex MPEG-2/MPEG-4 signals for SPTS transmission
- ✓ SPTS and MPTS streaming (CBR or VBR)
- UDP and RTP MPEG transport stream over IP protocol
- √ Transmission of up to 4 SRT streams *(GTSRT)

$\mathsf{ASI}\text{-}\mathsf{IP}\,\mathsf{in/out}$

- 4x ASI input or output, each BNC port configurable as input or output
- ✓ PID remapping and filtering
- RTP/ IP input streaming with FEC error correction
- ✓ DVB/ARIB transport stream processing
- ✓ Demultiplexing from MPTS to SPTS
- ✓ High density 24 ASI in or out in 1 RU
- Supports IP input and output streaming (CBR or VBR)
- ✓ Supports 188 byte and 204 byte packet size
- √ Transmission of up to 4 SRT streams *(GTSRT)

8VSB-ATSC/QAMJ.83BIP Gateway

- Multi transport stream reception for ATSC and QAM signals
- 8x 8VSB-ATSC/QAM J.83 B tuners with 4 RF inputs
- √ RTP/ IP FEC output stream protection
- √ High density reception 48 transponder
 in 1 R I I
- ✓ Demultiplex MPEG-2/MPEG-4 signals for SPTS transmission
- ✓ SPTS and MPTS streaming (CBR or VBR)
- UDP and RTP MPEG transport stream over IP protocol







GT34 GT35 GT36

8x/16x DVB-S/S2/S2X - IP Gateway

- ✓ DVB-S/S2/S2X IP gateway for IPTV, CATV and multiscreen solutions
- Reception of up to 16x DVB-S/S2/S2X satellite transponders via 4 RF-inputs
- For saving cabling costs integrated
 SAT multiswitch
- √ Professional DVB transport stream processing
- ✓ SPTS and MPTS streaming (CBR or VBR)
- ✓ UDP and RTP MPEG transport stream over IP protocol
- High-density reception of 96 transponders in 1 RU

HD/SD Encoder with 4x HDMI

- √ HD/SD MPEG-4 (AVC, H.264) and HD/SD MPEG-2 video encoding
- ✓ Up to 4 HDMI inputs per module
- ✓ Professional multiplexer integrated
- ✓ SPTS and MPTS streaming (CBR or VBR)
- ✓ Supports PSI/SI processing
- ✓ Integrated into the TANGRAM System-Management
- ✓ Control and managment via web-UI
- √ Transmission of up to 4 SRT streams *(GTSRT)

✓ HD/SD MPEG-4 (AVC, H.264) and HD/SD MPEG-2 video encoding

HD/SD Encoder with 4x SDI or A/V inputs

- ✓ Up to 4 HDMI inputs per module
- Professional multiplexer integrated
- ✓ SPTS and MPTS streaming (CBR or VBR)
- √ Supports PSI/SI processing
- ✓ Integrated into the TANGRAM System-Management
- ✓ Control and managment via web-UI
- √ Transmission of up to 4 SRT streams *(GTSRT)