

Head-End Station

Multi tuner + MPTS + SPTS → Multiplex to MPTS + DVB-C or DVB-T

Features

6 x DVB-S2/S2X/C/T/T2 mit CI + 10 x DVB-S2/S2X + 16 x MPTS + 128 x SPTS
 → 16 lines MPTS + DVB-C/T

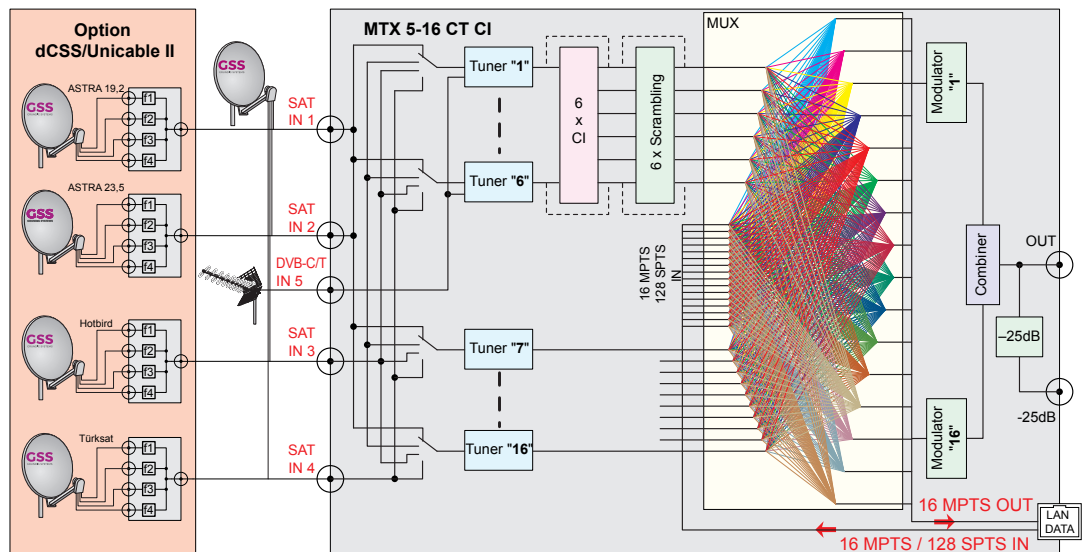
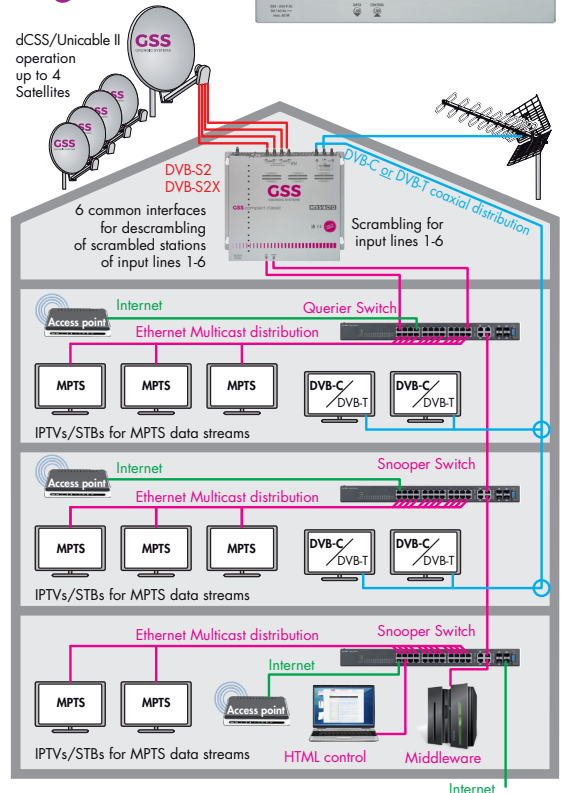
Input (Overall input data rate max. 900 Mbit/s):

- 4 SAT IF inputs with integrated multiswitch
- Up to 4 satellites with each 4 levels...
... with specially programmed multi-switches
- 1 terrestrial input
- 6 DVB-S2/S2X/T/T2/C tuners + 10 x DVB-S2/S2X tuners
- 16 x MPTS und 128 x SPTS
- 6 CI slots for CA modules (for tuners 1 – 6)
- Scrambling of selected Services (for tuners 1 – 6)

Output (Overall output data rate max. 820 Mbit/s):

- SID and TS-/ON-ID remapping
- Multiplex to 16 output lines
 - The services of the 160 input lines can be assigned arbitrarily to the 16 output lines (depending on the maximum possible data rates/line and over all).
 - Max. 256 Services / max. 256 PCR corrections / max. 256 EIT.
- Multiplex to 16 x MPTS
 - Free adjustable Multicast IP addresses.
 - Automatic M3U list generation (for e.g. Panasonic IP TVs)
- Multiplex to 16 full band modulators - QAM or COFDM
 - suitable for adjacent channels
 - symbol rates and modulation individually adjustable
- HTML user interface
- World wide access via OpenVPN connection
- Notification in case of data overflow or transponder failure

MULTIPLEX
DVB-S2X



Technical data:

The devices meet the EU directives 2011/65/EU, 2014/30/EU and 2014/35/EU.
The product fulfils the guidelines and standards for CE labelling.

Unless otherwise noted all values are specified as "typical".

Data input

MPTS streams	16
SPTS streams	128
IGMP	V2
Protocols:	UDP (User Data Protocol), RTP (Real-Time Transport Protocol)

RF input DVB-S2/S2X

Frequency range:	910 ... 2150 MHz
DVB-S modes:	QPSK 1/2, 2/3, 3/4, 5/6, 7/8
DVB-S2 modes:	QPSK 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK 3/4, 4/5, 5/6, 8/9, 9/10
DVB-S2X modes:	QPSK, 8PSK, 8APSK-L, 16APSK(-L), 32APSK(-L)
Symbol rate DVB-S:	QPSK: 1 ... 45 MSymb/s
Symbol rate DVB-S2:	QPSK: 4.5 ... 45 MSymb/s 8PSK: 4.5 ... 45 MSymb/s 16APSK: 4.5 ... 39 MSymb/s 32APSK: 4.5 ... 32 MSymb/s
Maximum data rate/tuner	83MBit/s
Level range:	60 dB μ V ... 80 dB μ V
Input impedance:	75 Ω
LNC supply:	14 V/18 V; maximum total output of 500 mA

RF input DVB-T/T2/C acc. to EN 302755 v1.3.1/300429

Channels	C5...C12, S21...S41, C21...C69
Frequency range:	42 ... 866 MHz
Input level:	60 dB μ V ... 80 dB μ V

Input data

Maximum over all input data rate (MPTS + SPTS + DVB-S/S2x/T/T2/C):	900 MBit/s
Buffer memory	1 GBit (corresponds e.g. at 16 x 50 MBit/s to approx. 16 x 50 ms buffer)

Output data

Data rate:	\leq 820 MBit/s
Remapping:	SIDs, TS-/ON-IDs
Services:	max. 256
PCR Corrections:	max. 256
EIT:	max. 256

IPTV Output

MPTS	16
IGMP	V2
Protocols:	UDP (User Data Protocol), RTP (Real-Time Transport Protocol)

RF output QAM (suitable for adjacent channels; symbol rates and modulation individually adjustable)

Frequency range:	42.0 MHz ... 868.0 MHz
Types of modulation:	QAM 4, 16, 32, 64, 128, 256
Output level:	80...96 dB μ V
Dynamic phase error:	$<$ 0.2 $^{\circ}$
MER:	$>$ 45 dB
Output impedance:	75 Ω
Symbol rate:	1000...7500 kBd

RF output COFDM (suitable for adjacent channels; modulation individually adjustable)

Frequency range:	42.0 MHz ... 868.0 MHz
Types of modulation:	QPSK, 16 QAM, 64 QAM
Transmission modes:	2k
Code rates	1/2, 2/3, 3/4, 5/6, 7/8
Guard intervals:	1/4, 1/8, 1/16, 1/32
Output level:	80...96 dB μ V
Output impedance:	75 Ω

Connections

SAT inputs:	4 F sockets
Terrestrial input:	1 F socket
LAN (for control/cascading) 100-BASE-T:	2 RJ45 socket
LAN (for data) 1000-BASE-T:	1 RJ45 socket

General

Supply voltage:	200...240 V ~, 50/60 Hz
Power consumption:	46 W (without LNC supply; without CI); max. 75 W
Ambient temperature:	0...+50 $^{\circ}$ C
Cooling	passive, fanless
Dimensions (W x H x D):	341 mm x 282 mm x 105 mm
Weight:	7 kg