

## Head-End Station

From 16 x RF + 16 x MPTS/SPTS any multiplex to 16 x MPTS

### Features

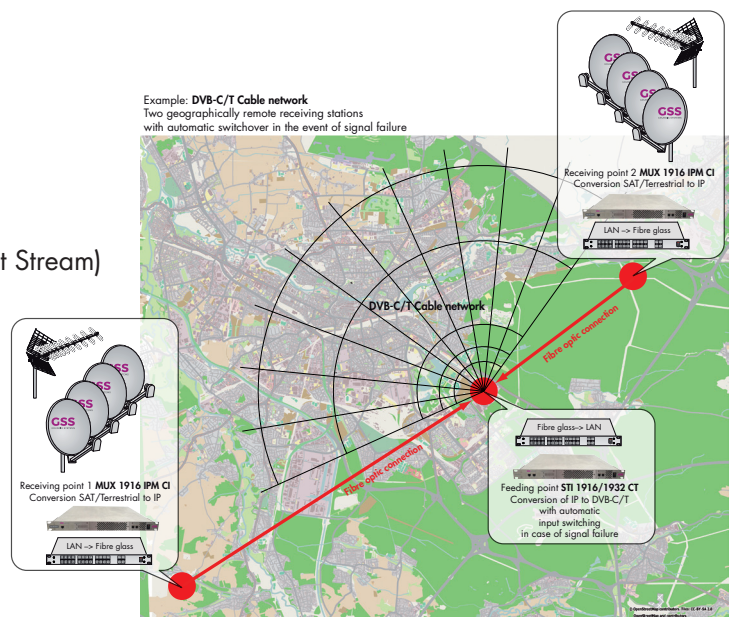
6 x DVB-S2/S2X/C/T/T2 with CI + 10 x DVB-S2/S2X + 16 x MPTS/SPTS → 16 x MPTS

#### Input:

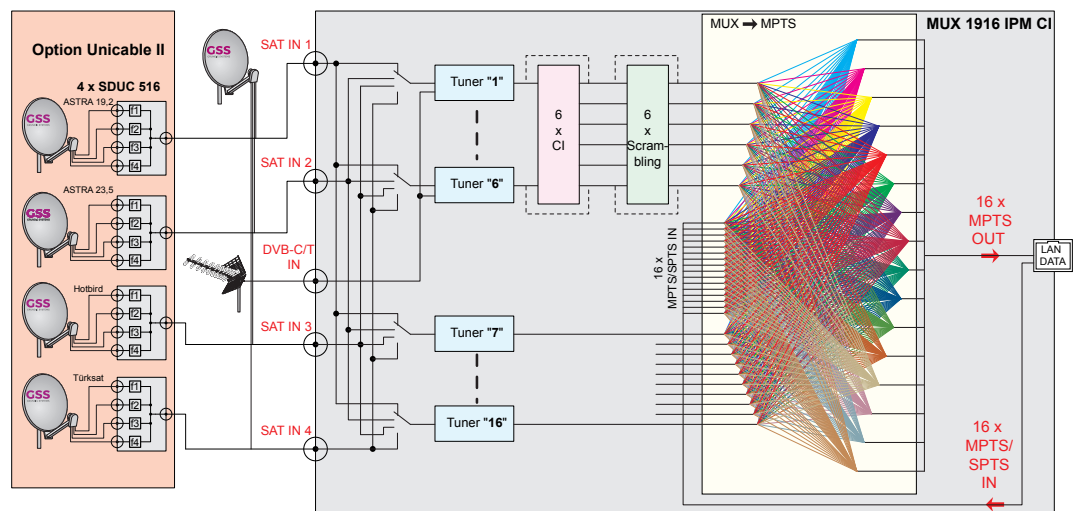
- 4 SAT IF inputs with integrated multiswitch
- Up to 4 satellites with each 4 levels...  
... with specially programmed Unicable II multi-switches
- 1 terrestrial input
- 6 DVB-S2/S2X/T/T2/C tuners (tuners 1 – 6)
- 6 CI slots for CA modules (for tuners 1 – 6)
- Scrambling of selected Services (for tuners 1 – 6)
- 10 DVB-S2/S2X tuners (tuners 7 – 16)
- 16 x MPTS/SPTS (Multiple/Single Programme Transport Stream)

#### Output:

- 16 x MPTS (Multiple Programme Transport Stream)
  - Max. 256 Services / max. 256 PCR corrections / max. 256 EIT.
  - Overall data rate max. 900 Mbit/s.
  - Free adjustable Multicast IP addresses.
  - Automatic M3U list generation (for e.g. Panasonic SATIP TVs)
- NIT and LCN (virtual QAM or COFDM output signal settings)
- HTML user interface
- World wide access via OpenVPN connection... by PC, tablet or smart phone with Internet access



- Redundant power supply
  - individually replaceable during operation
- Fan cooling
  - Fans can be replaced during operation
- Warning e-mail...  
... in case of data overflow, transponder, fan or power supply failure
  - Error message to a Syslog server.



## 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".

### 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 $\mu$ V ... 80 dB $\mu$ V
Input impedance:	75 $\Omega$
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 $\mu$ V ... 80 dB $\mu$ V

### Input data

Maximum over all input data rate ( $\Sigma$ lines 1-32):	900 MBit/s
--	------------

### Output data

Data rate:	$\leq$ 900 MBit/s
Services:	max. 256
PCR Corrections:	max. 256
EIT:	max. 256
Protocols:	UDP (User Data Protocol), RTP (Real-Time Transport Protocol)

 Live Streaming/Multicast Streaming requires specially designed and configured networks.

### 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

Mains units:	2 (can be replaced separately during operation)
Supply voltage:	100...240 V, 50/60 Hz
Maximum Power consumption	85 W
Ambient temperature:	0...+50 $^{\circ}$ C
Dimensions (W x H x D):	483 mm x 44.5 mm (1HU) x 490 mm