

# Technical Specification



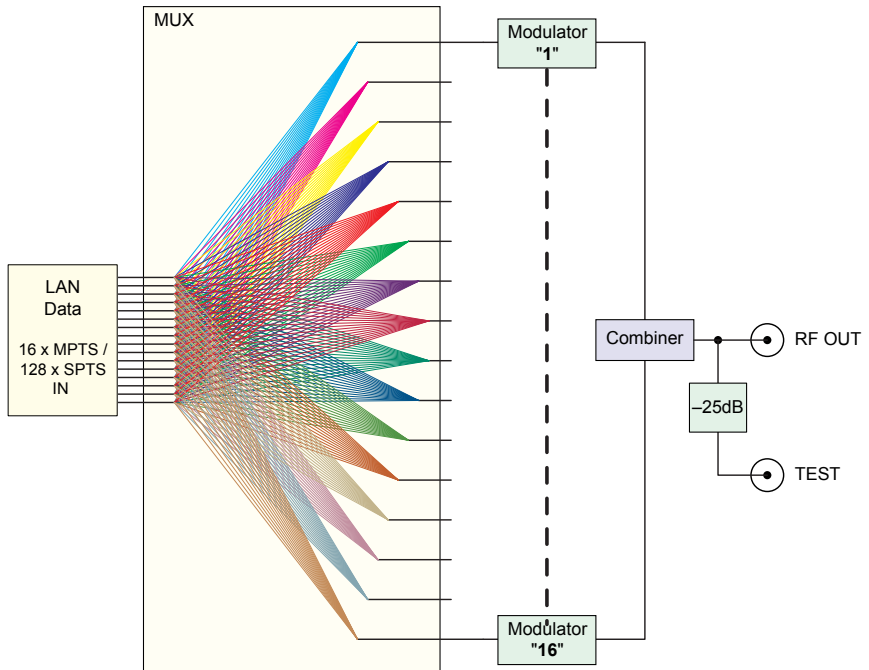
STIM 1916 CT

**Default access data:**  
192.168.0.120  
User: admin  
Password: geheim

## DESCRIPTION

The head-end station converts 16 MPTS streams and up to 128 SPTS streams (max. over all input data rate 900 Mbit/s) into 16 multiplexes and outputs them as 16 QAM or 16 COFDM modulated transponders.

## BLOCK DIAGRAM



## DESIGN TYPE

Version ..... GSS.lamina  
 Aluminium housing with stainless steel covers 483mm x 44.5mm (1HU) x 490mm ..... 19" rack  
 Weight: ..... 6 kg  
 Permissible ambient temperature: ..... 0 ... +50 °C  
 PSUs: ..... 2 (redundant; can be exchanged individually during operation)  
 Active cooling: ..... 3 case fans (can be exchanged individually during operation); 2 PSU fans

## FEATURES

### IN-/OUTPUTS

LAN input ..... 1  
 DVB-C/T output ..... 1  
 DVB-C/T test output (-25 dB) ..... 1  
 LAN control inputs <sup>2)</sup> ..... 2 (for control and another Lamina)  
<sup>2)</sup> internally connected via an integrated switch

## INPUT SIGNAL PROCESSING

<b>Maximum over all input data rate (<math>\Sigma</math> input lines 1-144)</b> .....	<b>900 MBit/s</b>
Display of the current total input data rate .....	$\Sigma$ of all <b>activated</b> input lines
Input lines can be switched off individually	
Individual input signal name .....	for input lines 1...144
<b>Input lines 1...16 (LAN)</b> .....	16 x MPTS
<b>Input lines 17...144 (LAN)</b> .....	128 x SPTS
Quick setup .....	Display of TS/ON IDs for input lines 1...144

## MULTIPLEX

**The services of the input lines can be assigned arbitrarily to the output lines.** <sup>3)</sup>

<sup>3)</sup> depending on the maximum possible data rates/line and over all

Indication of the...

... current/maximum possible <sup>4)</sup> total output data rate .....	$\Sigma$ Output lines 1...16
... current output data rate .....	Output lines 1...16
... peak value of output data rate reached so far .....	Output lines 1...16
... maximum possible output data rate <sup>4)</sup> .....	Output lines 1...16

<sup>4)</sup> depending on the output settings

SID Remapping .....

for each service

## OUTPUT SIGNAL PROCESSING

<b>Maximum over all output data rate (<math>\Sigma</math> output lines 1...16)</b> .....	<b>900 MBit/s</b>
Output lines .....	16
Output signal form .....	RF (DVB-C or DVB-T)
TS/ON ID Remapping .....	for output lines 1...16
Display of the current/maximum possible <sup>4)</sup> output data rate .....	for output lines 1...16

<sup>4)</sup> depending on the output settings

**RF output signals** .....

suitable for adjacent channels

Output modulation adjustable for the complete station .....

QAM or COFDM

Output lines .....

can be switched off individually

Total output level adjustable .....

0...-31dB

### QAM

Frequency/Channel; Symbol rate; Modulation, Spectrum, Level (0...-10dB) individually adjustable for each output line.

### COFDM

Frequency/Channel; Spectrum; Modulation; Code rate; Guard interval; Bandwidth; Level (0...-10dB) individually adjustable for each output line

## NIT

Renew; delete; add transponder; import NIT of other devices; export NIT

NIT modes: Output of the displayed NIT (user); alternatively, transmission of the input NIT (original); alternatively, no NIT (deactivate).

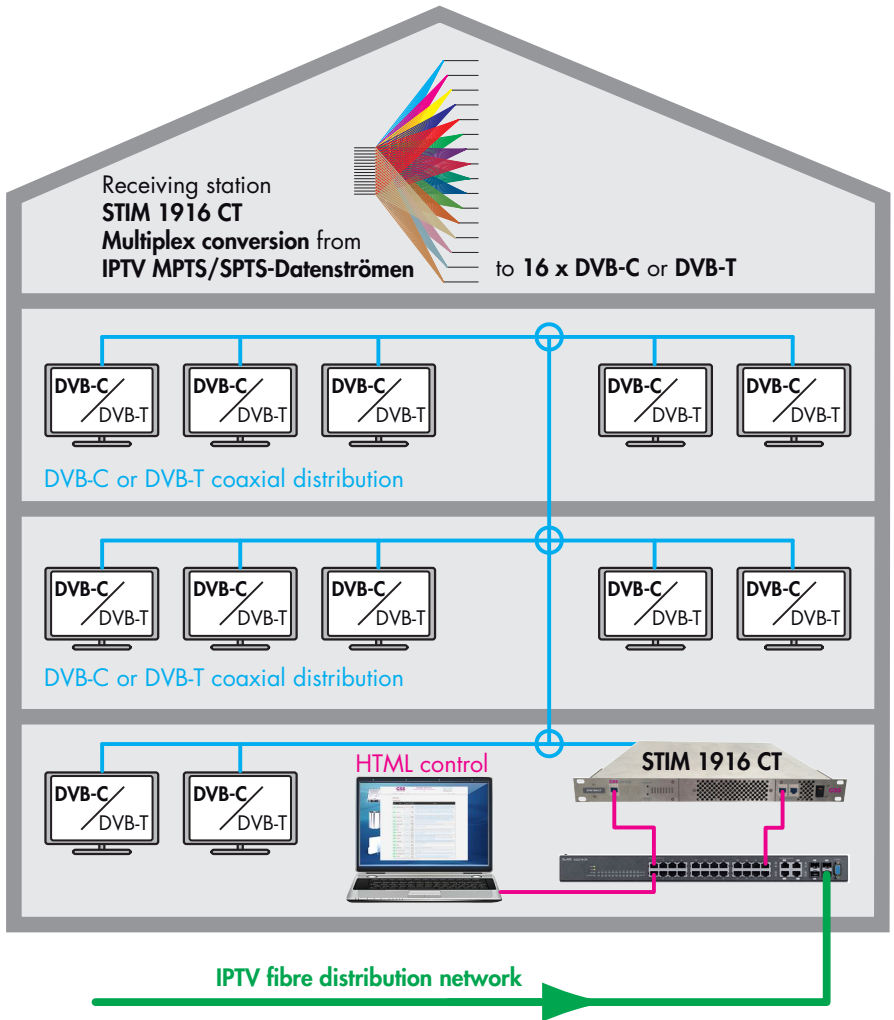
Note in case of faulty NIT

## LCN

Generation of an LCN list (programme location number preassignment)

## SYSTEM

User interface .....	HTML
Logbook.....	Display of warnings and events
Response times adjustable.....	for input signal and data overflow errors
Notification in case of errors .....	via mail and to your syslog server <sup>5)</sup>
Transmission of the logbook entries .....	to a syslog server <sup>5)</sup>
	<sup>5)</sup> Internet connection required
Network interfaces .....	adjustable
OpenVPN connection.....	world wide access to the head-end station <sup>5)</sup>
	<sup>5)</sup> Internet connection required
Safety.....	Password protection
Number format for IDs.....	switchable decimal or hexadecimal
Backup the configuration.....	Backup and restore
Manager.....	several configurations can be stored in the device
Network diagnostic tool.....	Ping
Factory reset (via menu "Firmware").....	all settings except password and IP address!
Reset button.....	only network settings and password
Monitoring .....	of power supplies and case fans
Assembly instruction (offline; PDF) .....	in menu Help



## TECHNICAL DATA

The devices meet the EU directives 2011/65/EU, 2014/30/EU and 2014/35/EU.

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

### Data input

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

### Input data

Maximum over all input data rate ( $\Sigma$ lines 1-144): .....	900 MBit/s
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### Output data

Remapping .....	SIDs, TS-/ON-IDs
Services: .....	max. 256
PCR Corrections: .....	max. 256
EIT: .....	max. 256

### 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 $\mu$ V
Dynamic phase error: .....	< 0.2 °
MER: .....	> 45 dB
Output impedance: .....	75 $\Omega$
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 $\mu$ V
Output impedance: .....	75 $\Omega$

### Connections

RF output: .....	1 F socket
Test output (-25 dB): .....	1 F socket
LAN (for control/cascading) 100-BASE-T: .....	2 RJ 45 socket
LAN (for data) 1000-BASE-T: .....	1 RJ 45 socket

### General

PSUs: .....	2 (redundant; can be exchanged individually during operation)
Mains voltage: .....	100...240 V, 50/60 Hz
Maximum Power consumption .....	50 W
Admissible ambient temperature: .....	0 ... +50 °C
Dimensions (WxHxD): .....	483 mm x 44,5 mm (1HU) x 490 mm
Weight: .....	6 kg

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