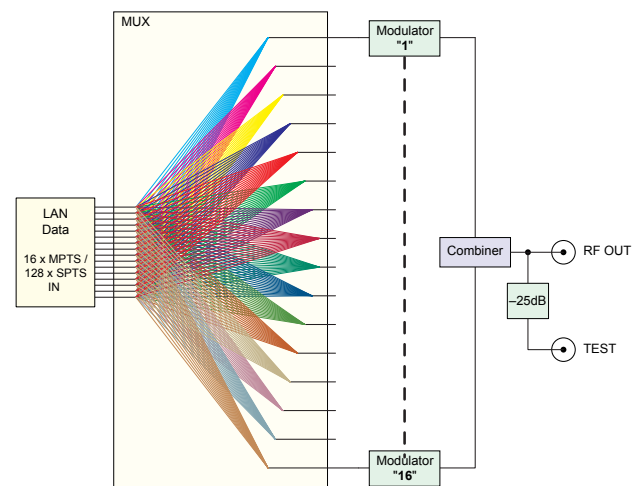
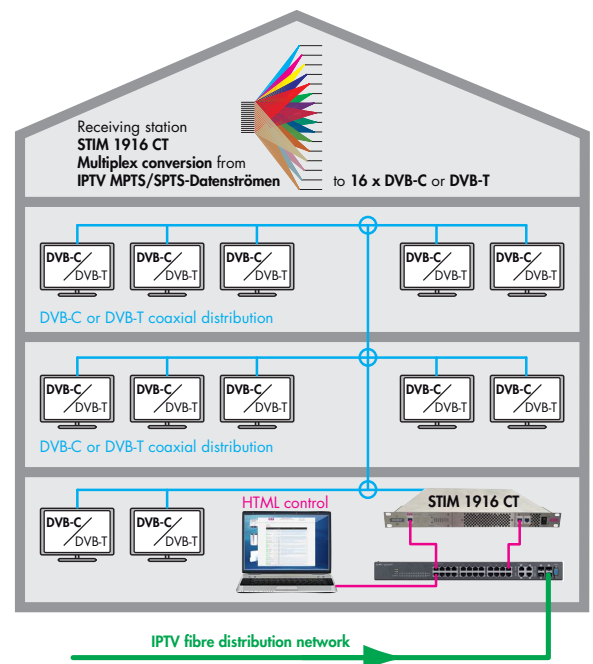


Modulator

16 x MPTS + 128 x SPTS → 16 x QAM oder COFDM

Features

- 1 Gbit LAN input
 - 16 x MPTS + 128 x SPTS
 - 900 MBit/s maximum over all input data rate (Σ input lines 1-144)
 - Multicast Stream IPs are freely adjustable
 - RTP, UDP
- Multiplex
 - The services of the 144 input lines can be assigned arbitrarily to the 16 output lines (depending on the maximum possible data rates/line and over all).
- Direct Conversion
- 16 full band modulators - QAM or COFDM
 - Electronically adjustable output level
 - suitable for adjacent channels
 - Symbol rates and modulation individually adjustable
- Transport Stream Processing:
 - SID remapping
 - TS-/ON ID remapping
 - Network Information Table (NIT) for complete head-end station
 - LCN (Logical Channel Numbering)
 - Adjustable data rate
- HTML user interface
- World wide access via OpenVPN connection...
 - ... by PC, tablet or smart phone with Internet access
- Redundant power supply
 - Two fully satisfying mains units
 - Half load operation
 - For UPS and mains or two-phase operation
 - Can be replaced separately during operation
 - Audible warning when one power supply fails
- Fan cooling
 - Fans can be replaced separately during operation.
- Notification in case of data overflow or transponder, fan or power supply failure
 - Warning e-mail for error entries in the logbook.
 - Error message to Syslog server.
 - Response time for input signal or data overflow error adjustable.



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
Over all user data rate:.....	≤ 900 MBit/s
Protocols:	UDP (User Data Protocol), RTP (Real-Time Transport Protocol)

RF output QAM

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 °
MER:	> 45 dB
Output impedance:	75 Ω
Symbol rate:.....	1000...7500 kBd

RF output COFDM

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

LAN (for data) 1000-BASE-T:	1 RJ45 socket
LAN (for control) 100-BASE-T:	2 RJ45 sockets
RF output:	1 F socket
RF test output (-25 dB):	1 F socket

General

Mains units:	2 (redundant; can be replaced separately during operation)
Supply voltage.....	100...240 V, 50/60 Hz
Power consumption:	50 W
Cooling fans:	3 (can be replaced separately during operation)
Ambient temperature:	0...+50 °C
Dimensions (W x H x D):	483 mm x 44.5 mm (1HU) x 490 mm