

Technical Specification



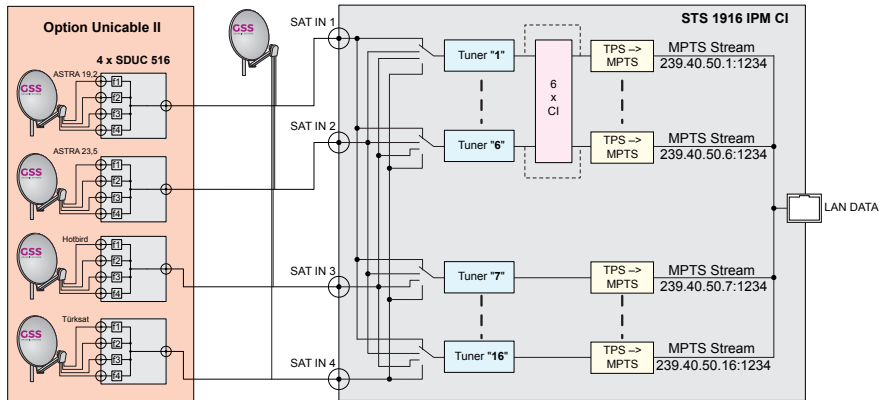
STS 1916 IPM CI

Default access data:
192.168.0.120
User: admin
Password: geheim

DESCRIPTION

The head-end station converts 16 transponders modulated acc. to DVB-S/DVB-S2 standard (up to 32 APSK) into 16 MPTS transportstreams. In conjunction with specially programmed Unicable II multi-switches up to 4 satellites can be received.

BLOCK DIAGRAM



DESIGN TYPE

Version GSS.lamina
 Aluminium housing with stainless steel covers 483 mm x 44.5 mm (1HU) x 490 mm..... 19" rack
 Weight: 5.5 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

SAT IF inputs.....	4 (inputs 1...4)
LNB power supply 14V/18V optionally 14V fix; switchable.....	max. 500 mA
Unicable II operation ¹⁾	max. 4 satellites with 4 levels each
	¹⁾ in conjunction with specially programmed Unicable II multi-switches
LAN data output	1
LAN control inputs ²⁾	2 (for control and another Lamina)
	²⁾ internally connected via an integrated switch

INPUT SIGNAL PROCESSING

Individual input designation (inputs 1...4).....	adjustable; e.g. satellite/level
Individual input signal name.....	for input lines 1...16
Input lines 1...16	DVB-S/S2; inputs 1...4 selectable
	Display of frequency offset and C/N with reserve
6 CI slots for CA modules.....	lines 1...6

FILTER & CA

Station filter	lines 1...16
PID filter	lines 1...16
TS/ON ID indication	lines 1...16
6 CI slots for CA modules.....	lines 1...6
Display of the current/maximum possible ³⁾ total output data rate.....	Σ Output lines 1...16
Display of the current output data rate	Output lines 1...16
Display of maximum possible output data rate ³⁾	Output lines 1...16
	³⁾ depending on the output settings

OUTPUT SIGNAL PROCESSING

Maximum over all output data rate (Σ output lines 1...16)	800 MBit/s
Output lines.....	16
Output signal form	MPTS

MPTS output signals

Protocols.....	UDP or RTP
Display of the current/maximum possible total output data rate	Σ output lines 1...16
Display of the current/maximum possible output data rate	output lines 1...16
Output lines can be switched off individually	MPTS output lines 1...16
Multicast IP addresses and ports adjustable.....	MPTS output lines 1...16
Maximum output data rate/line.....	adjustable
Quick-Setup.....	for output lines 1...16
Generation of a M3U service list	for Panasonic-VIERA-TV devices

Virtual RF output signals (to generate a NIT and LCN)

Output modulation adjustable for the complete station	QAM or COFDM
Output lines can be switched off individually	RF output lines 1...16

Virtual **QAM** (to generate a NIT and LCN)
Frequency/Channel; Symbol rate; Modulation, Spectrum individually adjustable for each output line.

Virtual **COFDM** (to generate a NIT and LCN)
Frequency/Channel; Spectrum; Modulation; Code rate; Guard interval; Bandwidth individually adjustable for each output line

NIT

A generated NIT is output via the MPTS output data streams.

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)

A generated LCN is output via the MPTS output data streams.

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 ⁴⁾
Transmission of the logbook entries	to a syslog server ⁴⁾
	⁴⁾ Internet connection required
Network interfaces	adjustable
OpenVPN connection	world wide access to the head-end station ⁴⁾
	⁴⁾ 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

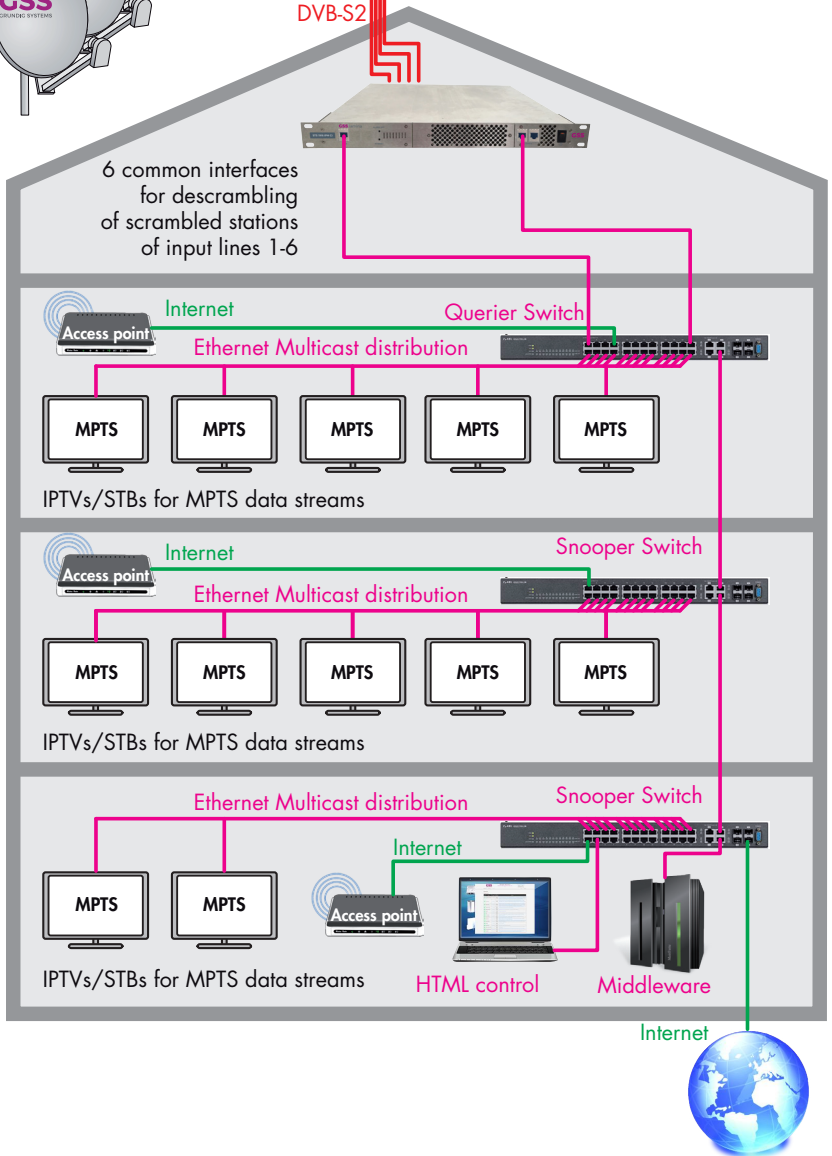
APPLICATION EXAMPLE

Unicable-II-
operation
up to 4
Satellites



DVB-S2

Receiving Station
STS 1916 IPM CI
Conversion 16 x SAT
to 16 x IPTV MPTS



TECHNICAL DATA

The devices meet the following EU directives:

2011/65/EU, 2014/30/EU, 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-S/S2 (ETSI 300 421)

Frequency range:	950 ... 2150 MHz
DVB-S mode:	QPSK
DVB-S2 modes:	QPSK, 8PSK, 16APSK, 32APSK
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	83 MBit/s
Level range:	60 dB μ V ... 80 dB μ V
Input impedance:	75 Ω
LNC supply:	14 V/18 V max. 500 mA

Over all output data

Data rate: ≤ 800 MBit/s

IPTV Output

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

Connections

SAT inputs: 4 F sockets
LAN (for control/cascading) 100-BASE-T: 2 RJ 45 sockets
LAN (for data) 1000-BASE-T: 1 RJ 45 socket
Common Interfaces: 6

General

PSUs: 2 (redundant; can be exchanged individually during operation)
Mains voltage: 100...240 V, 50/60 Hz
Maximum Power consumption: 75 W
Admissible ambient temperature: 0 ... +50 $^{\circ}$ C
Dimensions (WxHxD): 483 mm x 44,5 mm (1HE) x 490 mm
Weight: 5.5 kg

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