

# Technical Specification



## STC 4-16 IPM CI

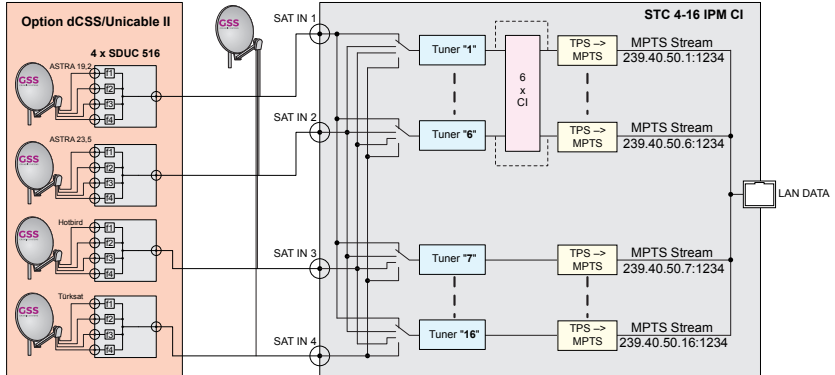
**Default access data:**  
192.168.0.120  
User: admin  
Password: geheim

**GSS**.compact classic

## 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 multi-switches up to 4 satellites can be received.

## BLOCK DIAGRAM



## DESIGN TYPE

Version ..... GSS.compact classic  
 Stainless steel housing 341 x 282 x 105 mm ..... wall mounting  
 Weight: ..... 7 kg  
 Permissible ambient temperature: ..... 0 ... +50 °C  
 Cooling ..... passive, fanless

## FEATURES

### IN-/OUTPUTS

SAT IF inputs ..... 4 (inputs 1...4)  
 LNB power supply 14V/18V optionally 14V fix; switchable ..... max. 500 mA  
 dCSS/Unicable II operation <sup>1)</sup> ..... max. 4 satellites with 4 levels each  
     <sup>1)</sup> in conjunction with specially programmed multi-switches

LAN output ..... 1  
 LAN control input ..... 1

## INPUT SIGNAL PROCESSING

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

## FILTER & CA

Station filter .....	lines 1...16
PID filter (drop/remap).....	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 <sup>3)</sup> total output data rate .....	$\Sigma$ Output lines 1...16
Display of the current output data rate .....	Output lines 1...16
Display of maximum possible output data rate <sup>3)</sup> .....	Output lines 1...16

<sup>3)</sup> depending on the output settings

## OUTPUT SIGNAL PROCESSING

<b>Maximum over all output data rate (<math>\Sigma</math> output lines 1...16)</b> .....	<b>820 MBit/s</b>
Output lines.....	16
Output signal form .....	MPTS

### MPTS output signals

Protocols .....	UDP or RTP
IGMP .....	V2
Display of the current/maximum possible total output data rate .....	$\Sigma$ 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 GSS DRIP 1000 devices
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 .....	<b>QAM or COFDM</b>
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

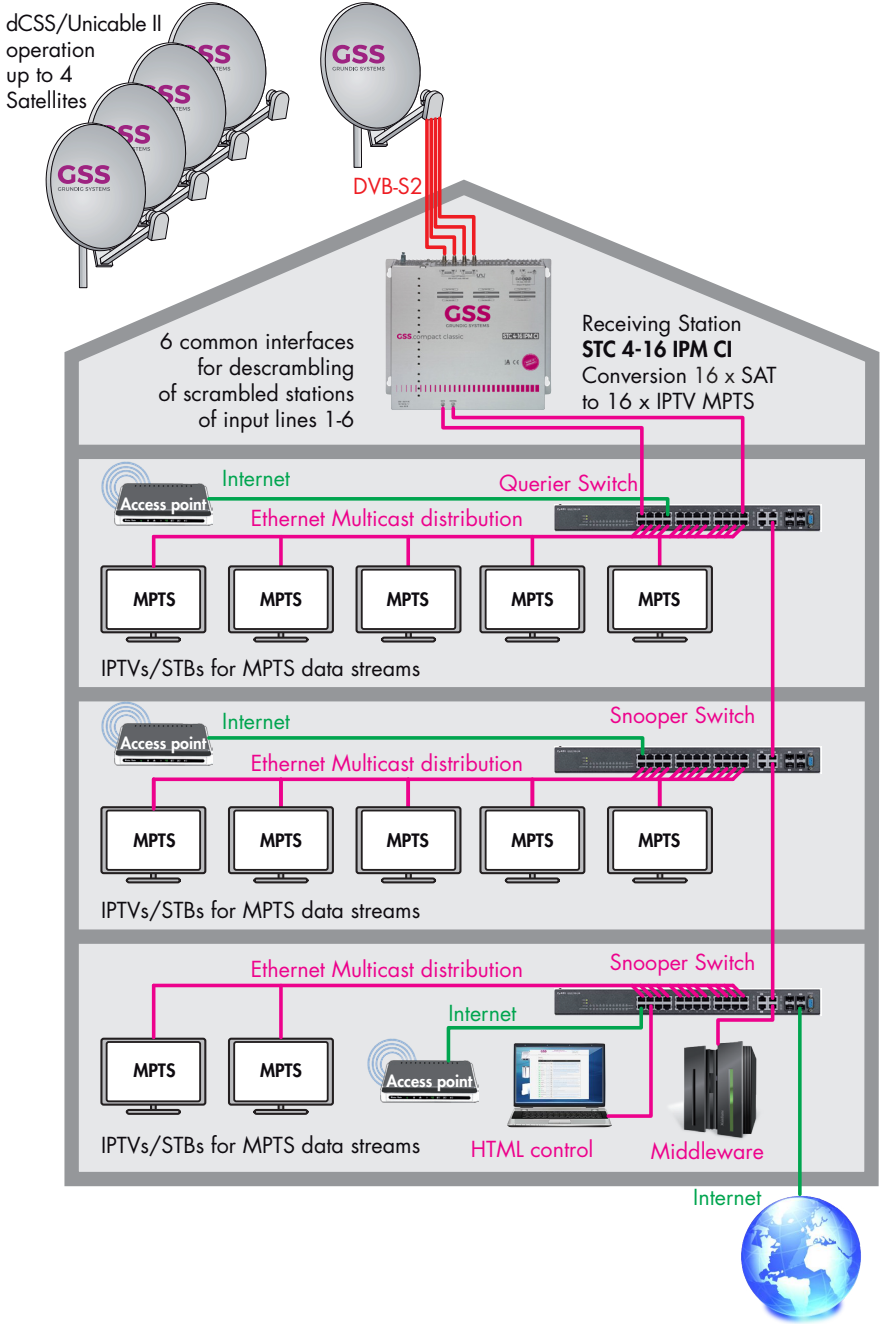
Generation of an LCN list (programme location number preassignment)

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

### SYSTEM

User interface .....	HTML
- User Administrator .....	Full access
- User Guest .....	read only, apply (save) locked
Logbook.....	Display of warnings and events
- Response times adjustable.....	for input signal and data overflow errors
- Notification in case of errors .....	via mail <sup>4)</sup>
	<sup>4)</sup> Internet connection required
Network interfaces.....	adjustable
OpenVPN connection.....	world wide access to the head-end station <sup>4)</sup>
	<sup>4)</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
Assembly instruction (offline; PDF) .....	in menu Help

# APPLICATION EXAMPLE



## 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-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 $\mu$ V ... 80 dB $\mu$ V
Input impedance:	75 $\Omega$
LNC supply:	14 V/18 V max. 500 mA

### Over all output data

Data rate:	$\leq$ 820 MBit/s
------------	-------------------

### IPTV Output

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

### Connections

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

### General

Mains voltage:	200...240V~, 50/60 Hz
Power consumption without LNC/CI	30 W
Maximum Power consumption:	70 W
Admissible ambient temperature:	0 ... +50 $^{\circ}$ C
Cooling	passive, fanless
Dimensions (WxHxD):	341 x 282 x 105 mm
Weight:	7 kg

GSS Grundig Systems GmbH • Beuthener Straße 43 • D-90471 Nuremberg  
Phone: +49 (0) 911 / 633 240 0 • Fax: +49 (0) 911 / 633 240 98  
[www.gss.de/en](http://www.gss.de/en) • [info@gss.de](mailto:info@gss.de)

Service: Phone: +49 (0) 911 / 633 240 90 • [service@gss.de](mailto:service@gss.de)

