

Technical Specification



STC 4-16 CT CI

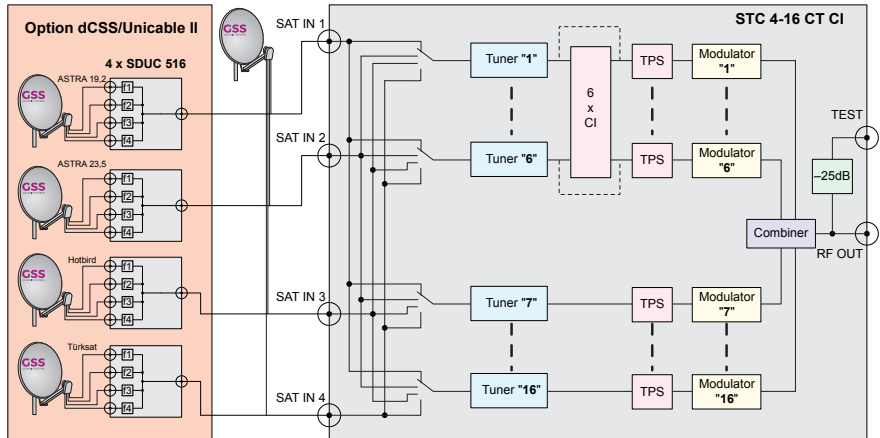
Default access data (HTML + SFTP):
192.168.0.120
User: admin
Password: geheim

DESCRIPTION

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

An integrated MediaPlayer enables the output of a video stream (max. data rate 10MBit/s) in a loop instead of transponder 16.

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 ¹⁾ max. 4 satellites with 4 levels each
¹⁾ in conjunction with specially programmed multi-switches

DVB-C/T output 1
 DVB-C/T test output (-25 dB) 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

Input lines 1...16DVB-S/S2; inputs 1...4 selectable
Display of frequency offset and C/N with reserve
6 CI slots for CA modules.....lines 1...6
Integrated **MediaPlayer** for one transport stream format file (max. 10MBit/s) optionally for line 16.

FILTER & CA

Station filter lines 1...16
PID filter (drop/remap)..... lines 1...16
TS/ON ID Remapping³⁾..... for output lines 1...16
6 CI slots for CA modules.....lines 1...6
Display of the current/maximum possible⁴⁾ total output data rate Σ Output lines 1...16
Display of the current output data rateOutput lines 1...16
Display of peak value of output data rate reached so farOutput lines 1...16
Display of maximum possible output data rate ⁴⁾.....Output lines 1...16
³⁾ for transponders with uncompressed EIT
⁴⁾ depending on the output settings

OUTPUT SIGNAL PROCESSING

Output lines..... 16
Output signal form RF
Display of the current/maximum possible ⁴⁾ output data rate for output lines 1...16
⁴⁾ 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 RF output lines 1...16
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

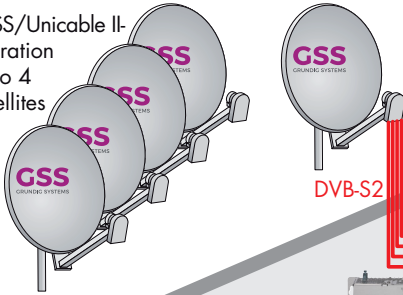
Generation of an LCN list (programme location number preassignment)

SYSTEM

User interface	HTML
- 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 ⁵⁾
	⁵⁾ Internet connection required
Network interfaces	adjustable
OpenVPN connection.....	world wide access to the head-end station ⁵⁾
	⁵⁾ 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

dCSS/Uicable II-
operation
up to 4
Satellites



6 common interfaces
for descrambling
of scrambled stations
of input lines 1-6



Receiving Station
STC 4-16 CT CI
Conversion from 16 x SAT
to 16 x DVB-C or DVB-T



DVB-C or DVB-T coaxial distribution



DVB-C or DVB-T coaxial distribution



DVB-C or DVB-T coaxial distribution



HTML control

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 μ V ... 80 dB μ V
Input impedance:	75 Ω
LNC supply:	14 V/18 V; max. 500 mA

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 μ V
Dynamic phase error:	< 0.2 °
MER:	> 45 dB
Output impedance:	75 Ω
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 μ V
Output impedance:	75 Ω

Connections

SAT inputs:	4 F sockets
RF output:	1 F socket
RF test output (-25 dB):	1 F socket
LAN (for control) 100-BASE-T:	1 RJ 45 socket
Common Interfaces	6

General

Mains voltage:	200...240V~, 50/60 Hz
Power consumption without LNC/CI	40 W
Maximum Power consumption:	80 W
Admissible ambient temperature:	0 ... +50 °C
Cooling	passive, fanless
Dimensions (WxHxD):	341 x 282 x 105 mm
Weight:	7 kg

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