SR6-CU

Controller Module for SR6-11C System Platform

Features

- USB device and USB host interface
- LAN remote interface
- SCPI oriented ASCII commands
- GUI (graphic user interface)

Applications

- ATE automatic test equipment
- R&D research and development
- production
- radio monitoring

Scope

The SR6-CU controller is foreseen for the integration into the SR6-11C system platform. The controller module enables an easy control and monitoring of slot-in modules, equipped in the system rack.
The controller offers LAN and USB remote interface. Via LAN an additional GUI is available. The remote control can be done via simple SCPI orientated ASCII commands.
The command set grows dynamically with the installed slot-in modules.
In systems with more than one controller unit the different controllers can be connected for a synchronous power up and down. Power up and power down of the controllers is possible by pressing the STANDBY button at any controller.

SNMP Functionality

Additional the controller offers SNMP (Simple Network Message Protocol) functionality. In case of an event an automatic SNMP message is generated via LAN interface.
An SNMP message is generated in case of e.g. wrong commands or a failure in hardware.

Self-Test Function

The SR6-11C handles a self-test functionality of the installed modules. The self-test procedure is configurable with a single test after power on, a continuous test during whole operation or disabling the self-test for hot-swapping of modules.

GUI (Graphic User Interface)

The SR6-CU controller has a GUI to control the controller and get information about it. The web interface offers a SCPI terminal for control the supported modules, installed in the SR6-11C rack.

The GUI enables an overview of the installed modules.
A file manager system is also available at the GUI.
A part of the internal memory is reserved for saving or manging system specific data like S2P files.

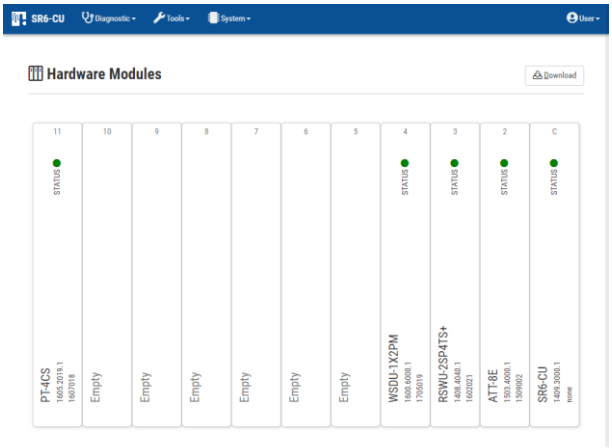


Figure: Overview of installed modules on GUI

Synchronous Operation

In combination with the SR6-CU controller, the execution of switching commands can be done in two ways:

- Direct switch execution after receiving single commands.
- Common synchronous switching after executed by a SYNC command.

In the synchronous switching mode commands are received without execution. After receiving a SYNC command, all switching operations are done in the same time.

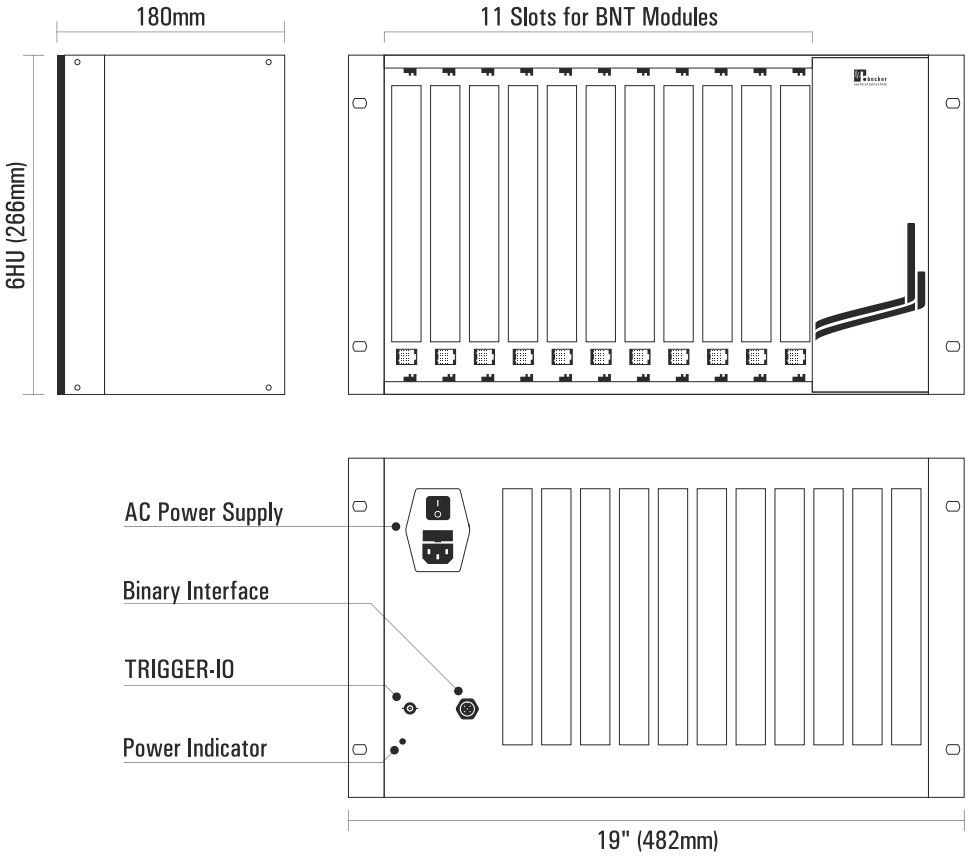
Specification

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
power supply	U_{DC}	23.5	24.0	24.5	V	via SR6-11C system platform
power consumption	P_{DC}		2		W	
Ethernet/LAN	X_{LAN}	RJ45	10/100BaseT			
USB client	X_{USBCLT}	2.0 (high speed)				USB type B
USB host	X_{USBHST}	2.0 (high speed)				USB type A
controllable modules	n_{MOD}			10		
dimensions	WxHxD	approx. 30 x 262 x 197			mm	6 U, 6 HP
weight	m		1		kg	
operating temp. range	T_o	+5		+ 60	°C	ambiance
storage temp. range	T_s	-40		+ 70	°C	
ordering information	SR6-CU		P/N: 1409.3000.1			

SR6-11C System Platform

The controller unit SR6-CU is foreseen for the integration into the SR6-11C system platform. Another 10 slots can be used for modules like RF switches, multicouplers, BIAS-Ts, level detectors and matrices.
Via the Trigger-IO interface at the rear side of the SR6-11C System Platform a synchronous operation in a device network of SR6-11C can be realized.

After a positive TTL pulse slope at the trigger input, the preloaded configurations are executed only by hardware in micro seconds.
In applications with very fast execution demands the hardware can be directly controlled via the binary interface on the rear side.



Appearances

SR6-CU front view

SR6-CU rear view

SR6-11C front view

Related Products

Product	Description	P/N
SR6-11C	System Platform with 11 Slots for Modules	1409.1202.1
SR6-CU	Controller Unit with LAN and USB Remote Interface	1409.3000.1
Unidirectional Products: Active Multicouplers, Matrices, Level Detectors		
WSDU-1X8A	8 Way High Dynamic Signal Conditioning Multicoupler 100 kHz … 4000 MHz	1807.6300.1
WSDU-2X4A	2 Section 4 Way High Dynamic Signal Conditioning Multicoupler 100 kHz … 4000 MHz	1807.6300.1
WSDU-1X8L	8 Way Multicoupler Module 100 kHz … 4000 MHz	1807.6100.1
WSDU-2X4L	2 Section Hi Dynamic 4 Way Multicoupler Module 100 kHz … 4000 MHz	1807.6300.1
WSDU-2X4E+	2 Section 1x4 plus 1 1x2 Multicoupler Module 20 … 8000 MHz	1501.6200.1
RSWM-4X4	4x4 Switching Matrix -Non-blocking-, 100 kHz … 4000 MHz or 20 MHz … 4000 MHz	1205.4100
RSWM-4X4E	4x4 Ultra-Wideband Switching Matrix -Non-blocking-, 20 MHz … 8000 MHz	2001.4100.1
RFLD-8RE	8 Channel True Power RF Level Detector, 1 MHz … 8000 MHz	1505.8000.1
Bi-Directional Products: Switches, Matrices, Attenuators, Delay Lines, BIAS-Ts, Splitters/Combiners		
RSWU-2SP4TS+	2 Channel Non-reflective SP4T Switches plus 1 Channel SPDT Switch, 100 kHz … 8500 MHz	1408.4010.1
RSWU-8SPSTS	8 Channel Non-reflective SPST Switch 100 kHz … 8500 MHz	1408.4000.1
RSWU-4SPDTS	4 Channel Non-reflective SPDT Switch 100 kHz … 8500 MHz	1408.4020.1
RSWU-8SPST-CS	8 Channel High Isolation SPST with DC Load Simulation, 100 kHz … 7500 MHz	1811.4100.1
BSWM-4X4	4x4 High Isolation Bi-Directional Switching Matrix –Blocking-, 100 kHz … 7500 MHz	1205.4600.1
ATT-8E	8 Channel Digital Step Attenuator 0 … 31.75 dB, 100 kHz … 8000 MHz	1503.4000.1
DLL-4	4 Channel Programmable Delay Line 0 …1700 ps, 250 MHz … 4000 MHz	1303.4200.1
PT-4CS	4 Channel Programmable DC Sink 0 … 400 mA, 100 kHz … 8500 MHz	1605.2020.1
PT-4CL	4 Channel Wideband DC Load, 100 kHz … 8500 MHz	1605.2040.1
BSDU-2X4A+	2 Section 4 Way, Bi-Directional Signal Conditioning plus 2 Way Splitter/Combiner, 500 MHz … 7500 MHz	1903.6100.1
BSDU-2X4+	2 Section 4 Way Wideband Bi-Directional plus 2 Way Splitter/Combiner, 500 MHz … 7500 MHz	1903.6200.1