

SR6-CU

Controller Module for SR6-11C System Platform

Features

- LAN remote interface
- USB device and USB host 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 platform. The controller offers LAN and USB remote interfaces. 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.

Synchronous Operation

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

- Direct execution after receiving single commands.
- Synchronous command execution via hardware, triggered by a SYNC command.

In synchronous execution mode, commands are received without execution. After receiving a SYNC command, all executions are done synchronous in micro seconds.

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 managing system specific data like S2P files.

Hardware Modules

[Download](#)

11	10	9	8	7	6	5	4	3	2	C
STATUS							STATUS	STATUS	STATUS	STATUS
PT-4CS 1605.2019.1 1607018	Empty	Empty	Empty	Empty	Empty	Empty	WSDU-1X2PM 1600.6000.1 1705019	RSWU-2SP4TS+ 1408.4040.1 1602021	ATT-8E 1503.4000.1 1509002	SR6-CU 1409.3000.1 none

Figure: Exemplary representation of the user interface

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			

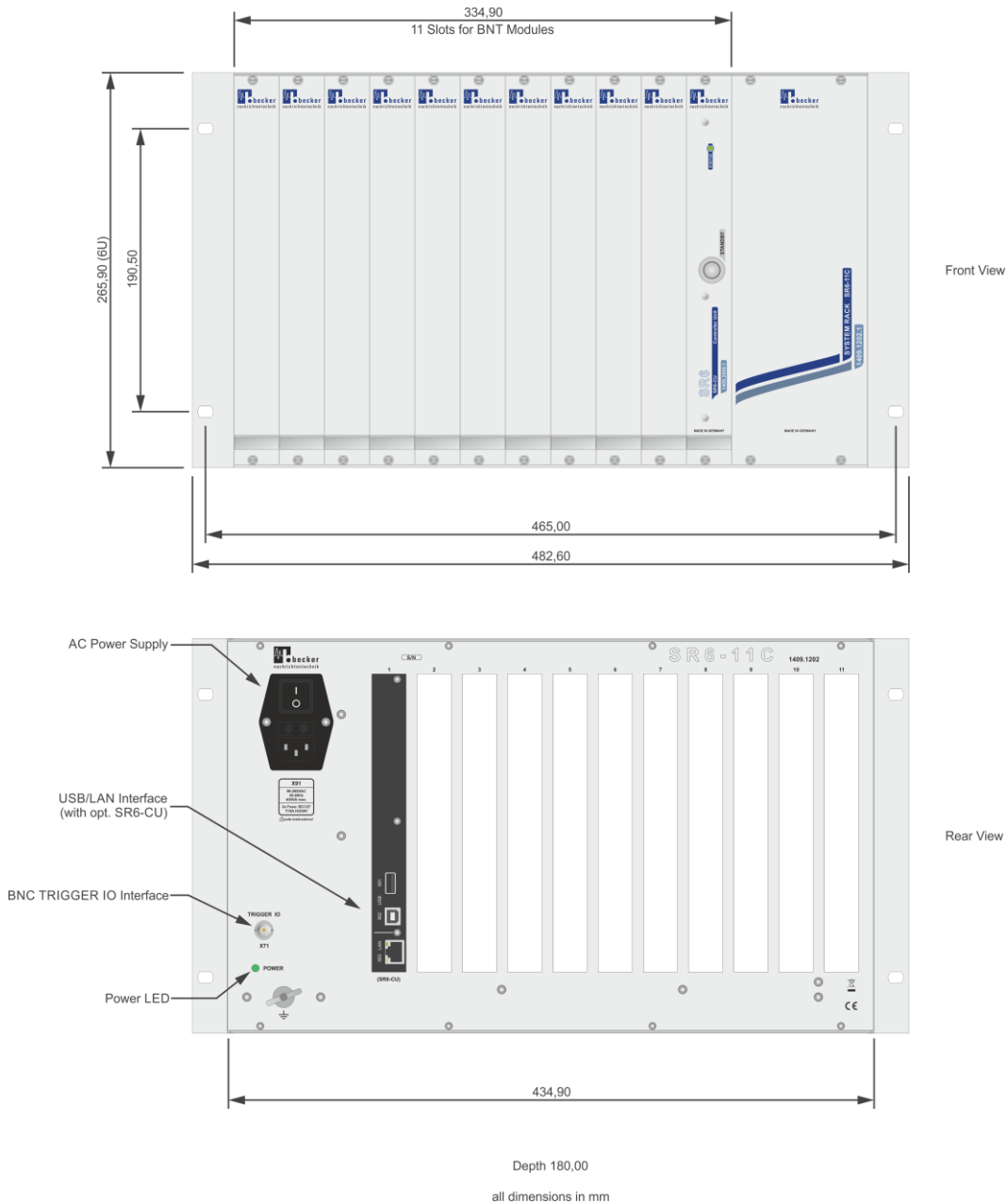
Appearances

SR6-11C System Platform

The SR6-CU module is foreseen for the integration into the SR6-11C system platform. 11 slots in the SR6-11C can be used for modules like RF switches, matrices, multicouplers, attenuators, BIAS-Ts, level detectors, bi-directional splitters/combiners for signal conditioning and a controller unit. For the control of SR6-CU module the SR6-CU controller unit is required.

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.

Dimensions of SR6-11C System Platform



Front View



Rear View



SR6-11C System Platform



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-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	1807.6200.1
WSDU-2X4E+	2 Section 1x4 plus 1x2 Multicoupler Module, 20 ... 8000 MHz	1501.6200.1
WSDU-1X8U	Ultra-Wideband 8-Way Multicoupler Module, 100 kHz ... 18000 MHz	2109.6000.1
WSDU-1X8S	High Dynamic 1x8 Shortwave Multicoupler Module, 300 kHz ... 30 MHz	1502.6100.1
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	1807.6400.1
WSDU-1X2PM	2 Channel, 5 W Multicoupler with ALC Capability, 20 MHz...3000 MHz	1606.6000.1
RSWM-4X4	4x4 Switching Matrix -Non-blocking-, 100 kHz ... 4000 MHz or 20 MHz ... 4000 MHz	1205.4100.1
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, Filters		
BSDU-1X8A	8 Way Bi-directional Signal Conditioning Splitter Module, 500 ... 9000 MHz	2109.6200.1
BSDU-2X4A	2 Section 4 Way Bi-directional Signal Conditioning Splitter Module, 500 ... 9000 MHz	2109.6250.1
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-4X4E	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
FBS-1590	L1 Band GNSS Notch Filter	1511.5100.1

