CB-3U18S-6X8-ENET

Features

Switch Configuration	2x2 up to 12x12 Terminated & Non-Terminated
Configuration	Non-Blocking Crossbar
Operating Frequency	DC-18 GHz or DC-26.5 GHz
Manual Control	LCD with Keypad (1RU) Touch Screen LCD (2RU-4RU)
Remote Control	**ENET:** Ethernet, Built-In Website, RS-232 and USB port. **GPIB:** IEEE-488, RS-232 and USB port.
Impedance	50-Ohm

Application

For more complex test setups and signal switching, the CB-series crossbar matrix is an excellent choice. It allows testing of multiple UUT/DUT (units/devices under test) with many input/output signals or high speed communication buses without having to connect and disconnect them from the setup.

A crossbar system can route any input signal to any output port such that the path between the I/O ports is unique at any given time.

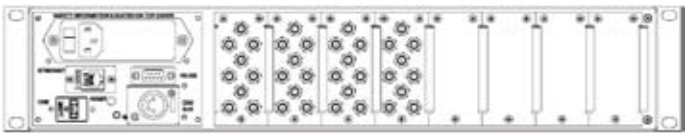
Software Features:

- Built-in firmware to add, remove and address switches for trouble free switch replacement
- Application configuration available through "configuration file" - transferred via HTTP, USB or COM ports.
- Keeps track of the life of each switch
- Field upgradable firmware via boot loader (1)

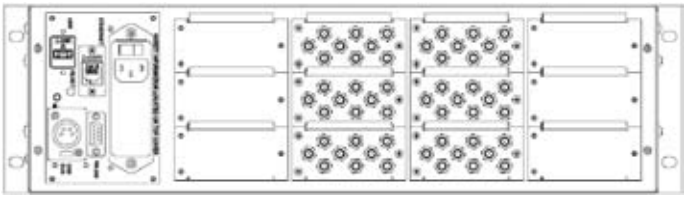
(1) Check Availability

Rear View Samples (2)

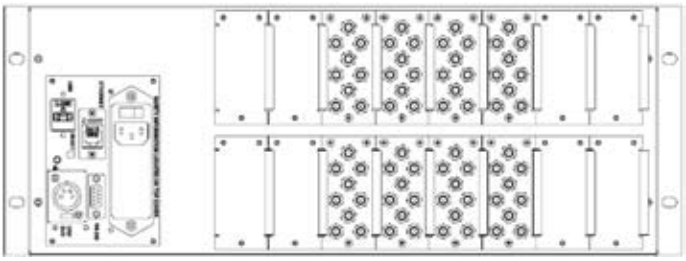
2RU



3RU



4RU



(2) The exact port locations may be different

CAN Bus Specifications

Relay Type	Coaxial, Normally Open
I/O Connector Type	SMA Female or N Female
Switching Time	50 ms (incl. control delay)
Operating Life (min)	1,000,000 (cold)
MTBF	30,000-50,000 Hours
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +70 °C
Operating Humidity	10-80% non-condensing
Dimensions (max)	19" Wide rack mount 15.25" (1U-2U) & 18.5" (3U-4U) Depth (w/o handles) 1U to 4U Height (1.75" to 7.00")
Weight	Varies per part number

Manual Control	LCD/Keypad or Touch Screen LCD
Remote Control Ethernet or GPIB Option	
ENET Option	Ethernet (TCP/IP), 10/100 BASE-T, built-in website, manual or DHCP IP address assignment
RS-232	DB9-F, Baud Rate1200 -115200 bps
USB Port	Operates as a virtual RS-232
GPIB Option	GPIB (IEEE-488), RS-232 and USB
Commands/Syntax	Dow-Key SCPI commands
Fuse	Accessible/replaceable on the rear
AC Power Supply	110-240 VAC, 50-60 Hz
Cooling / Venting	Fans as required with 2U-4U models

RF Specifications

SEE APPENDIX C FOR SWITCH SCHEMATICS

SP10T NORMALLY OPEN SWITCHES

DC-18 GHz, Non-Terminated, SMA or N				2x2 to 10x10
Frequency [GHz]	VSWR	Isolation [dB]	Insertion Loss [dB]	CW Power [W]
DC-4	1.30	80	2.0	100
4-8	1.35(1)	80	3.0	90
8-12	1.45	80	3.5	75
12-16	1.55	80	4.0	65
16-18	1.80	80	5.0	60

(1) VSWR 1.45:1 for N-type connectors.

SP12T NORMALLY OPEN SWITCHES

DC-18 GHz, Non-Terminated, SMA or N				11x11 to12x12
Frequency [GHz]	VSWR	Isolation [dB]	Insertion Loss [dB]	CW Power [W]
DC-4	1.30	80	2.0	100
4-8	1.45	80	3.5	90
8-12	1.55	80	4.0	75
12-16	1.80	80	4.5	65
16-18	2.00	80	5.5	60

SP10T AND/OR SP12T NORMALLY OPEN /FAILSAFE SWITCHES

DC-18 GHz, Terminated, SMA or N				11Tx12 /12x11T /11Tx11T (MAX)
Frequency [GHz]	VSWR	Isolation [dB]	Insertion Loss [dB]	CW Power [W]
DC-4	1.30	80	2.0	100
4-8	1.45	80	3.5	90
8-12	1.65	80	4.0	75
12-16	1.80	80	4.5	65
16-18	2.00	80	5.5	60

We reserve the right to alter, amend or replace any specifications at our sole discretion and without prior notice.

Part Number Selector

CB – 1U 18 S – 4 [ ] x 6 [ ] – ENET

Chassis Height
1U = 1.75”
2U = 3.50”
3U = 5.25”
4U = 7.00”

Frequency
18 = DC-18 GHz
26 = DC-26.5 GHz

Connector
N = N female
S = SMA female

Number of Inputs (1)
1 = 1 Input
2 = 2 Inputs
3 = 3 Inputs
. . .
12 = 12 Inputs

Terminated Inputs
T = 2W Termination
(otherwise leave it blank)

Number of Outputs (1)
1 = 1 Output
2 = 2 Outputs
3 = 3 Outputs
. . .
12 = 12 Outputs

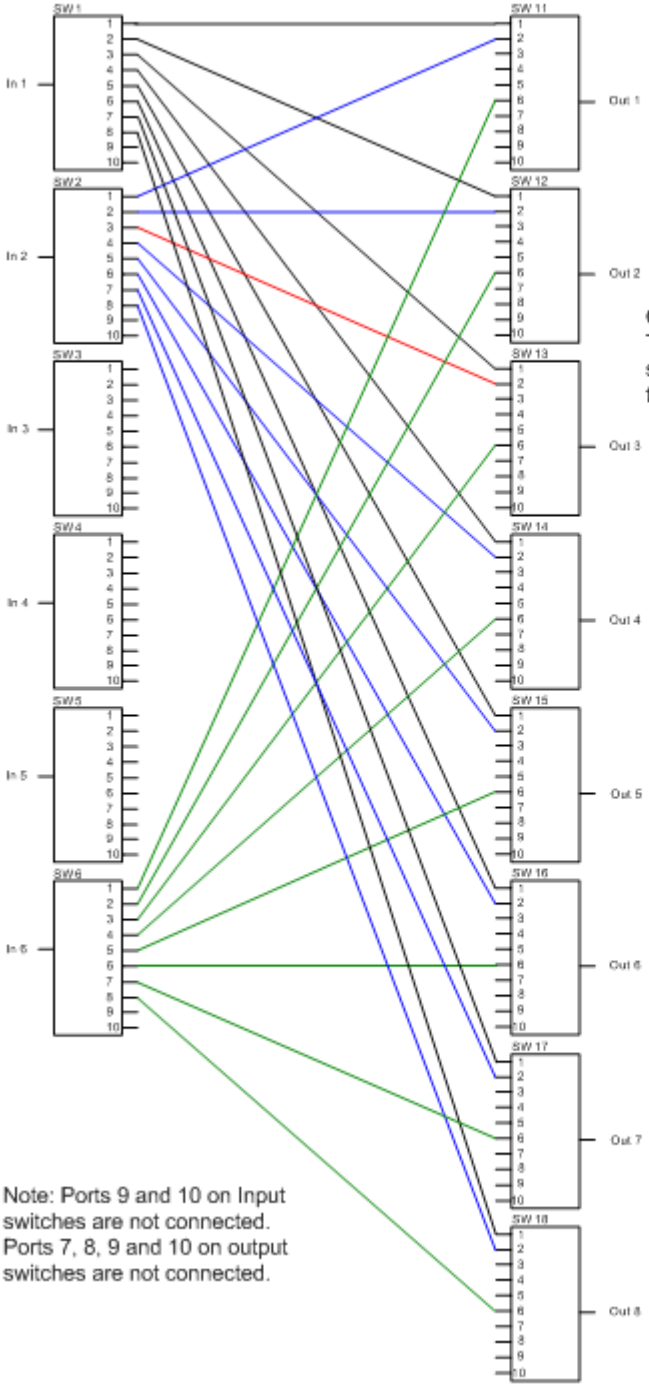
Terminated Outputs
T = 2W Termination
(otherwise leave it blank)

Remote Control
ENET = Ethernet
GPIB = GPIB

(1) Maximum Inputs X Outputs per following:
For DC-18GHz Switch: 12 Inputs Non-Terminated X 12 Outputs Non-Terminated
11 Inputs Terminated X 12 Outputs Non-Terminated
12 Inputs Non-Terminated X 12 Outputs Terminated
For DC-26.5GHz Switch: 8 Inputs Terminated X 8 Outputs Terminated

CB-SERIES: Example of Crossbar Switch Configurations

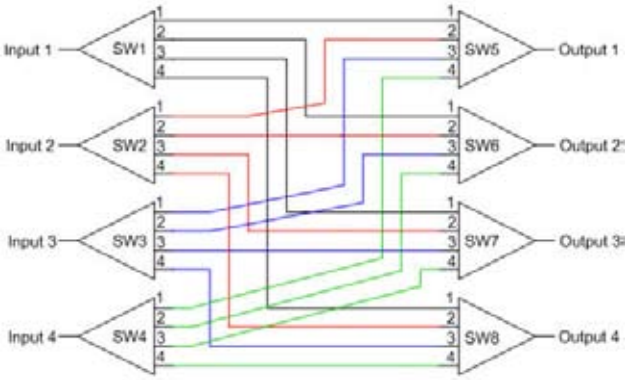
6X8 NON-TERMINATED SWITCH



Connection example:
To connect Input 2 to Output 3 close switch 2 to position 3 and switch 13 to position 2.

Note: Ports 9 and 10 on Input switches are not connected. Ports 7, 8, 9 and 10 on output switches are not connected.

4X4 NON-TERMINATED SWITCH



We reserve the right to alter, amend or replace any specifications at our sole discretion and without prior notice.