RFMS-4X256-B Switch Matrix 4 x 256

The RFMS-4X256-B allows 4 RF common ports to be routed to any of 256 RF Ports. Any of the common ports can be connected to any one of the 256 ports. Each of the paths allows for fully Bi-Directional RF signal flow. This is a blocking matrix, which means 2 common ports cannot be connected to the same output port simultaneously. Switching can be manually set via a front panel keypad and display or over the Ethernet or USB ports using a simple TCP/IP protocol provided with the unit. The Matrix can also be programmed to execute a sequence of up to 64,000 switching operations. Once programmed, the matrix can execute the programmed switch sequence by triggering over the built-in Rohde and Schwartz VNA interface.   The Matrix can be switched at over 200,000 cycles per second.

Electrical Specifications:

No	Parameter	Minimum	Typical	Maximum	Units
1	Frequency Range	900	-	2500	MHz
2	Insertion Loss	-	-	-8dB	dB
3	Impedance (any activated port)	-	50	-	Ohms
4	Return Loss (any activated port)	10	-	-	dB
5	Termination (any inactive port)	-	0	-	Ohms
5	P1dB	+30	-	-	dBm
6	Isolation (see table)	-80	-	-	dB
7	Switching Speed 50% Trigger to 10% RF Power	-	-	5	usec
8	Switching Speed 50% Trigger to 90% RF Power	-	-	5	usec
9	Power	115/230VAC 50/60Hz			
10	Local Control	Front Panel Keypad with LCD Display			
11	Remote Interface	Ethernet and USB			
12	Remote Programming	Telnet over TCP/IP			
13	Remote Control	"Trigger" and "Ready" over Shielded DB-25 cable			
14	Size	4 RU (7" H x 19" W x 20" D) estimated			

Isolation Table:

No	ISOLATION	Minimum	Units
6a	Common Ports: Between any two active ports -each common port switched to a different 256 port -externally terminated in 50 Ohms, both ends	80	dB
6b	Common Ports: Between any two inactive ports -no switching path to any of the 256 ports -common port externally terminated in 50 Ohms	80	dB
6c	256 Ports: Between any two active ports -each 256 port switched to a different common port -externally terminated in 50 Ohms, both ends	80	dB

Mechanical Specifications:

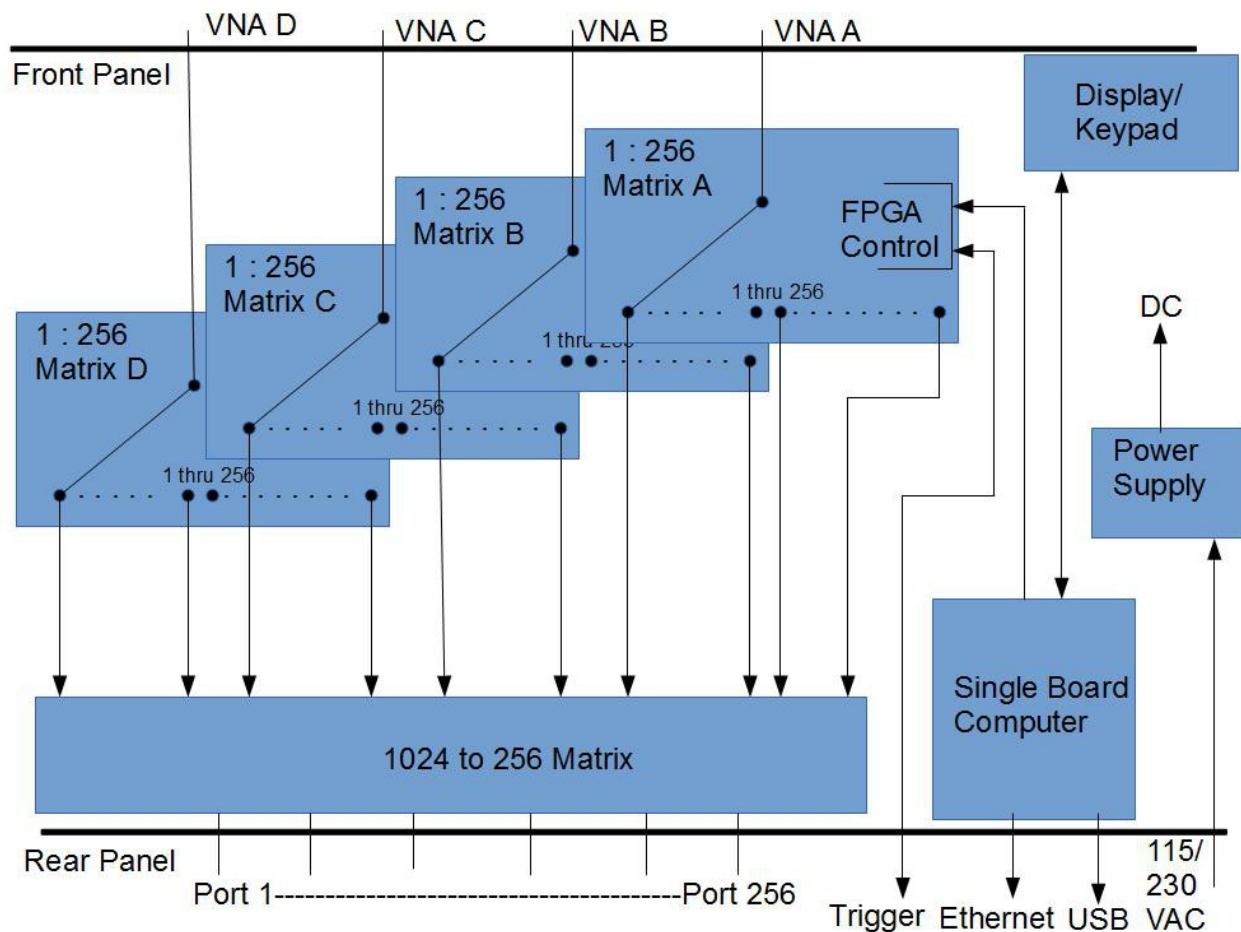| No	Parameter	Minimum	Typical	Maximum	Units
1	Operating Temperature	0	-	+50	°C
2	Storage Temperature	-20	-	+70	°C
10	Ethernet Connector (Qty 1)	RJ-45 Female			
11	USB Connector (Qty 1)	Type B Female			
12	Trigger Connector (Qty 1)	25 Pin D Female			
13	RF Connector (Qty 260)	SMA female DC-6GHz rated VSWR 1.25 max Body gold plated brass Pin gold plated BeCu Insulator PTFE			
14	Size	4 RU (7" H x 19" W x 20" D) estimated			
15	Weight	TBD			

CALL OUR SALES DEPARTMENT FOR MORE INFORMATION OR VARIATIONS OF THIS PRODUCT.

Corry Micronics, Inc.   One Plastics Rd. - Corry, PA 16407
(724) 940-7556 ext. 138   Fax (724) 940-7707   *www.cormic.com*

Remote Control Sequence:

- Measurement sequence up to length 64,000 is written to a text file and loaded via Telnet over TCP/IP to the switch matrix.
- Matrix sends Telnet response indicating successful text file transfer
- Matrix waits for a hardware "ready for trigger" signal via the DB25 interface
- When received, the matrix switches to the first/next command in the sequence and responds over the DB25 interface with a hardware "switching complete" signal

Block Diagram: