

256 Port Fan-Out RF Matrix Switch

QXM2150M128X128CS1AA12000

128X128 SMA(f) 50Ω Controller

Exclusive Flexible Matrix Architecture, Industry Leading Specifications, and Hot-Swappable Components Provide an *XTREME* Signal Management Solution

The **XTREME 256** L-band matrix switch is a full fan-out (distributive) non-blocking signal management solution that routes an input to any or all outputs. The design features an industry exclusive flexible architecture that supports both symmetric and asymmetric configurations of up to 256 combined inputs and outputs in a compact 12 RU chassis. Hot-Swappable Input, Bridge, and Output RF Cards, I/O Modules, redundant power supplies, and cooling fans provide maximum reliability.

950-2150 MHz Operating Range

Flexible Matrix Configurations including (64x192, 96x160, and 128x128)

Optional integrated expansion allows from 16x496 to 256x256 without external expansion modules

Redundant Hot Swappable Power Supplies

All active cards are Hot-swappable in less than a minute

Adjustable Input and Output Gain

Hot Swappable Cooling Fans









Specifications and Operating Conditions

QXM2150M128X128CS1AA12000		
As Configured:	128x128 Fully Populated	
RF Connectors:	SMA, 50Ω	
Optical Connectors:	N/A	
Operating Frequency:	950-2150 MHz	
Frequency Response: Default Gain: typically Centered @ 0 dB	≤ ±1 dB typ., ±1.5 dB max.	
Any 40 MHz:	±0.2 dB typ., ±0.5 dB max.	
Input P1dB:		
Default Gain:	0 dBm	
Noise Figure:		
Default Gain:	≤18 dB max	
OIP3:		
Default Gain:	8 dBm min	
Input Return Loss:	12 dB min	
Output Return Loss:	12 dB min	
Isolation:		
Input to Input:	65 dB min	
Output to Output:	65 dB min	
Input to Output ² :	55 dB min	
Input Gain Range:	-17 to +13.5 dB in .5 dB steps	
Output Gain Range:	-14.5x to +33 dB in .5 dB steps	
RF Sensing Range:	-5 to-50 dBm	
AGC Tracking Range:	-40 to -10 dBm setpoint	
Conitabina Cunnal	150 mS per crosspoint typical *	
Switching Speed:	<5 uS from break to make	
Maximum Input Power: (No Damage)	20 dBm (30 VDC max on any port)	
Group Delay Variation:	5nS	
Optical Input Specifications:	N/A	
Spectrum Analyzer Option:	N/A	

*	typical refers to expected product performance that is useful in application of	
	the product but is not covered by the product warranty	

 $^{^{1}}$ Specifications valid at unity in (Input Gain = 0, Output Gain = 0) for RF inputs.



	Control:	
Front Panel/Web Server, Dual Redundant QPE CPU Cards		
Local Control:		
15" Front Panel Touchscreen		
Remote Control:		
10/100/1000 BaseTx	Ethernet Ports to Web Server Controller	
Independent 10/100 BaseTx Ethernet Ports to each QPE Controller		
SNMP	V2c, v3	
TCP/IP	Quintech 2.15 Protocol (Port 9100)	
Web Server		
Secure Web Server with Custom SSL Certificate		
TELNET with option to disable		
Macro Scripting Language to Automate Changes and Monitoring		
XR Bus Expansion Standard		
Optional Ethernet Expansion		
NTP Time Client		
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Alarms and Logging:	
SNMP Traps on Status Change	
SNMP Trap on Crosspoint Change	
SysLog, SQL, or CSV Format Log File	
Q-Sense:	

Primary and Backup Input Pairs: Backup is automatically switched if the Primary Input falls below the threshold level.

Power and Cooling Requirements:		
AC Input Range:	100-240 VAC Autoranging 50/60 Hz 5A	
Hot-Swappable Redundant Supplies with Separate AC Inlets		
Power Consumption:	575W/675W @ 120/240 VAC	
Fans:	Long-life fan (3 hot swappable trays)	
Input, Bridge and Output RF Modules:	Hot Swappable	

Physical:		
Dimensions:	12 RU (21" H x 19" W x 20.5" D) 22"	
	including rear handles	
Maiaht.	235 lbs. gross (crated and palletized)	
Weight:	150 lbs. net	
Certifications:	CE, TUV NRTL, FCC Part 15	

Environmental Parameters:	
Operating Temperature:	0 to 50° C
Storage Temperature:	-10° C to 70°C
Humidity:	up to 95% non-condensing
Altitude:	10,000 feet AMSL

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV

