

# 80 Port Fan-Out RF Matrix Switch

### QX22200V32X32CS3AA32010

32X32 SMA(f) 50 Ω Controller

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

The **XTREME 80** 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 80 combined inputs and outputs in a compact 2 RU chassis. Hot-Swappable Input, Matrix, and Output RF Cards, redundant power supplies, and cooling fans provide maximum reliability.

850-2450 MHz Operating Range

Flexible Matrix Configurations including (32x32, 20x48, 32X48, 40x24, 24x40, 60x20, and 16x64)

**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**

QX22200V32X32CS3AA32010		
As Configured:	32X32 Fully Populated	
RF Connectors:	SMA(f) (50Ω)	
Optical Connectors:	N/A	
Operating Frequency:	950-2150 MHz	850-2450 MHz
Frequency Response: Default Gain¹: typically* Centered @ 0 dB	± 1.5 dB	± 2.5 dB
Any 36 MHz:	± 0.5 dB	
Input P1dB:		
Default Gain:	0 dBm min	
Noise Figure:		
Default Gain:	13 dB max	
OIP3:		
Default Gain:	+10 dBm	
Input Return Loss:	14 dB min	
Output Return Loss:	14 dB min	
Isolation:		
Input to Input:	60 dB	min
Output to Output:	60 dB	min
Input to Output:	55 dB min	50 dB min
Input Gain Range:	-19.5 to +12 dB	in .5 dB steps
Output Gain Range:	-15.5 to +16 dB	in .5 dB steps
RF Sensing Range:	-50 to 0	) dBm
AGC Tracking Range:	-40 to -10 dB	
Switching Speed:	150 mS per cross	spoint typical *
on the contract of the contrac	<5 uS from br	eak to make
Maximum Input Power:	20 dBm (30 VDC max on any port)	
(No Damage)	Optical: +10 dBm (Wave	
Group Delay Variation:	5nS	
Optical Input Specifications:	N/	A

Control:			
Front Panel/Web Server, Dual Redundant QPE CPU Cards			
Local Control:			
Front panel LCD w/rotary selector			
Remote Control:			
10/100/1000 BaseTx Ethernet Port 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			

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:	165W	
Fans:	Hot swappable by replacing front door	
Matrix and Input, Output RF Modules:	Hot Swappable	

Physical:		
Dimensions:	2 RU (3.5" H x 19" W x 23.25" D) 22"	
Weight:	34 lbs. gross (boxed) 28 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% RH non-condensing	
Altitude:	10,000 feet AMSL	

<sup>\*</sup> typical refers to expected product performance that is useful in application of the product but is not covered by the product warranty

<sup>&</sup>lt;sup>1</sup> Specifications valid at unity gain (Input Gain = 0, Output Gain = 0). Optical link specs vary based on transmitter.