XTREME 256-C

256 Port Fan-In RF Matrix Switch

QXF2150S128X128CS1AA12000

128X128 SMA(f) 50 Ω 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-in (combining) non-blocking signal management solution that routes an output to any or all inputs. 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.

- **850-2150 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**

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QUINTECH® The Source for RF Reliability

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV ISO 9001

XTREME 256-C

256 Port Fan-In RF Matrix Switch

[1]Specifications and Operating Conditions

QXF2150S128X128CS1AA12000	
As Configured/Expandable to:	128x128
RF Connectors:	SMA(f), 50 Ω
Optical Connectors:	N/A
Operating Frequency:	850-2150 MHz
Frequency Response: Default Gain[1]: typically Centered @ 0 dB	±3 dB
Any 36 MHz:	± 0.75 dB
Input P1dB:	
@ Default Gain:	(Input) +6 dBm (Output[2]) +14 dBm
Noise Figure:	
@ Default Gain[1]:	<23 dB
OIP3:	
@ Default Gain:	+ 15 dBm
Input Return Loss:	12 dB
Output Return Loss:	12 dB
Isolation:	
Input to Input:	65 dB min.
Output to Output:	65 dB min.
Input to Output[3]:	55 dB min.
Input Gain Range:	-17.5 to +14 dB in .5 dB steps
RF Sensing Range:	+10 to -50 dBm
AGC Tracking Range:	-35 to -10 dBm setpoint
Switching Speed:	150 mS per crosspoint typical *
	<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

[1] Specifications valid at unity gain

[2] Output P1dB calculated from known, specified, and inherent circuit performance.

[3] Adjacent paths should be properly terminated when measuring input-to output/ "crosstalk" isolation.

Control:	
Touchscreen/Web Server, Dual Redundant QPE CPU cards	
Local Control:	
15" Front Panel Touchscreen	
Remote Control:	
10/100/1000 Base Tx Ethernet Port to Web server Controller	
Independent 10/100 Base Tx 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:	100-250 VAC Auto-ranging 50/60 Hz
Hot-Swappable Redundant Supplies with Separate AC Inlets	
Power Consumption:	525W/650W @ 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
Weight:	235 lbs. gross (crated and palletized) 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

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