

80 Port Fan-In RF Matrix Switch

QF22200V32X32CS2AA32010

32X32 SMA(f) 50 Ω Controller

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

The QF22200V32X32CS2AA32010 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 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

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









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Specifications and Operating Conditions

QF22200V32X32CS2AA32010		
As Configured/Expandable to:	32x32	
RF Connectors:	SMA(f), 50 Ω	
Optical Connectors:	N/A	
Operating Frequency:	950-2200 MHz	850-2450 MHz
Frequency Response: Default Gain ¹ : typically* Centered @ 0 dB	± 2 dB	± 2.5 dB
Any 36 MHz:	± 0.5 dB	
Input P1dB:		
Default Gain:	0 dBm	n min.
Noise Figure:		
Default Gain:	13 dB max. (single connection) 24dB max. (full fan-in)	
OIP3:		
Default Gain:	+10 dBm min.	
Input Return Loss:	14 dB	13 dB
Output Return Loss:	14	dB
Isolation:		
Input to Input:	60	dB
Output to Output:	60	dB
Input to Output:	55 dB	50 dB
Input Gain Range:	-14.5 to +17 dE	3 in .5 dB steps
Output Gain Range:	-19.5 to +12 dE	3 in .5 dB steps
RF Sensing Range:	-50 to	0 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	

Control:		
Front Panel/Web Server, Dual Redundant QPE CPU Cards		
Local Control:		
Front panel LCD w/rotary selector		
Remote Control:		
10/100/1000 Base Tx 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	
Hot-Swappable Redundant Supplies with Separate AC Inlets		
Power Consumption:	160 W	
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

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 gain (Input Gain = 0, Output Gain = 0).