



160 Port Fan-In RF Matrix Switch

QF42450V64X32CB1AA32000

64X32 BNC(f) 75 Ω Controller

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

The ***XTREME 160-C*** L-band matrix switch is a full fan-in (combinational) non-blocking signal management solution that routes an output with any or all inputs. The design features an industry exclusive flexible architecture that supports both symmetric and asymmetric configurations of up to 160 combined inputs and outputs in a compact 4 RU chassis. Hot-Swappable Input, Matrix, and Output RF Cards, redundant power supplies, and cooling fans provide maximum reliability.

850-2450 MHz Operating Range	All active cards are Hot-swappable in less than a minute
Flexible Matrix Configurations including (64x64, 128x32, 80x48)	Adjustable Input and Output Gain
Redundant Hot Swappable Power Supplies	Hot Swappable Cooling Fans
8.4" Integrated Touchscreen LCD	

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<http://www.quintechelectronics.com/> • info@quintechelectronics.com

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QF42450V64X32CB1AA32000 Rev A, CO #32075 (Page 1 of 2)

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001



160 Port Fan-In RF Matrix Switch

Specifications and Operating Conditions

QF42450V64X32CS1AA32000	
As Configured/ Fully Populated:	64X32/64X64
RF Connectors:	BNC(f) (75Ω)
Optical Connectors:	N/A
Operating Frequency:	950-2150 MHz 850-2450 MHz
Frequency Response: Default Gain ¹ : typically* Centered @ 0 dB	± 2 dB ± 2 dB
Any 36 MHz:	± 0.5 dB
Input P1dB:	
Default Gain:	0 dBm min
Noise Figure:	
Default Gain:	14 dB max
OIP3:	
Default Gain:	+10 dBm min
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 50dB min
Input Gain Range:	-23.5 to +8 dB in .5 dB steps
Output Gain Range:	-19.5 to +12 dB in .5 dB steps
RF Sensing Range:	-50 to 0 dBm
AGC Tracking Range:	-40 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) Optical: +10 dBm (Wavelength 900-1650 nm)
Group Delay Variation:	5nS
Optical Input Specifications:	N/A

Control:	
Front Panel/Web Server, Dual Redundant QPE CPU Cards	
Local Control:	
8.4" Front panel Touchscreen LCD	
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:	250 W
Fans:	Hot swappable
Matrix and Input, Output RF Modules:	Hot Swappable

Physical:	
Dimensions:	4 RU (7.0" H x 19" W x 23.25" D)
Weight:	95 lbs. gross (boxed) 87 lbs. net

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).
Optical link specs vary based on transmitter.

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QF42450V64X32CB1AA32000 Rev A, CO #32075 (Page 2 of 2)

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