

QFM

16x16 Fan-In RF Matrix Switch



QFM



General Description:

The **QFM** is a full fan-in RF matrix switch available in 1 RU as 8x8, 8x16, 16x8 and 16x16. The **QFM** can be expanded to a maximum system size of 32x32 by adding additional modules. The **QFM** features Quintech's latest **Q-ROUTE™** and **Q-SENSE™** technology, which provides maximum reliability with signal path redundancy and auto reroute capabilities. The **QFM** is dual band with operating frequencies for IF 50 MHz - 200 MHz and 950 MHz - 2150 MHz. It also offers manual gain and AGC modes with a range of -20 dB to +8 dB in 0.5 dB steps with individual port control to support all modulation formats. The front panel LEDs allow monitoring of power supply and alarm status information.

Features & Benefits:

- Compact design - 16x16 in 1 RU
- Manual gain and AGC modes with a range of -20 dB to +8 dB in 0.5 steps
- Remotely controlled via web browser interface, Ethernet or Telnet via customer supplied PC
- **Q-ROUTE™** provides internal signal path redundancy by automatically rerouting around a failed signal path
- **Q-SENSE™** provides external signal path redundancy by automatic switching to a backup input signal, if signal level falls below user defined threshold¹

¹Q-Sense not available on all configurations. Limited to a maximum of 16 inputs.

Specifications:*	QFM L-Band	QFM IF
Operating Frequency:	950-2150 MHz	50-200 MHz
Configurations:	8x8 to 32x32 (with additional modules)	8x8 to 32x32 (with additional modules)
Gain Range (manual mode):	-20 dB to +8 dB in 0.5 dB Steps	-20 dB to +8 dB in 0.5 dB Steps
Impedance:	75 Ω, or 50 Ω	75 Ω, or 50 Ω
Input P1dB:	2 dBm	0 dBm
OIP3:	12 dBm	10 dBm
Frequency Response:	± 1.5 dB ± 0.4 dB Over Any 36 MHz Channel	± 2 dB ± 0.6 dB Over Any 36 MHz Channel
Isolation (input-to-input):	60 dB	65 dB
Isolation (output-to-output):	60 dB	60 dB
Isolation (input-to-output):	45 dB	45 dB
RF Input Power:	-10 dBm to -70 dBm	-10 dBm to -70 dBm
Input Balancing (manual mode):	-12 dB to +4 dB in 0.5 dB Steps	-12 dB to +4 dB in 0.5 dB Steps
Output AGC Level:	-10 dBm to -50 dBm	-10 dBm to -50 dBm
Input Return Loss:	13 dB	14 dB
Output Return Loss:	14 dB	13 dB
Noise Figure:	<23 dB @ 0 dB Gain	<20 dB @ 0 dB Gain
RF Connectors:	F-Type, BNC 75 Ω, or 50 Ω, SMA	
AC Input Power:	Autoranging 100-240 VAC, 50/60 Hz	
Power Consumption:	77 W	
Local Control:	Front Panel Keypad with LCD Display	
Remote Control:	RS-232, RS-485, SNMP, TELNet or TCP/IP Via Customer Supplied PC, Web Browser Control	
Software:	Basic PC Compatible Software and Command Protocol Included	
Mechanical:	16x16 in 1 RU: 1.75" H x 19" W x 18.5" D	
Weight:	14.5 lbs Gross (boxed), 12 lbs Net	

*Specifications may vary with connector type. See individual specification sheet for specific performance data.