# QRM

## 16 x 16 RF Matrix Routing Switch with **Q-ROUTE & Q-SENSE**



\*Specifications: L-band IF Broadband **Operating Frequency:** 950-2150 MHz 50-200 MHz 50-1000 MHz **Configurations:** 8x8 up to 32x32 8x8 up to 32x32 8x8 up to 32x32 Frequency Response: ± 2.25 dB ± 1.5 dB ± 2 dB ± 0.4 dB ± 0.6 dB ± 0.6 dB Over any 36 MHz channel Over any 36 MHz channel Over any 36 MHz channel Isolation: 65 dB Input to Input 60 dB Output to 65 dB Input to Input 60 dB Output to 60 dB Input to Input 60 dB Output to Output 50 dB Input to Output 55 dB Input to Output 45 dB Input to Output **RF Input Power** : -10 dBm to -70 dBm -10 dBm to -70 dBm -10 dB to -70 dB Gain Range -15 dB to +16 dB -15 dB to +16 dB -15 dB to +16 dB in 0.5 dB Steps in 0.5 dB Steps in 0.5 dB Steps (Manual mode): -10 dBm to -50 dBm -10 dBm to -50 dBm -10 dBm to -50 dBm **RF** Sensing and AGC Range: Input P1dB: +2 dBm -3 dBm -2 dBm OIP3: +10 dBm +8 dBm 8 dBm +14 dB +14 dB + 14 dB Input Return Loss : Output Return Loss: + 14 dB +14 dB +14 dB Noise Figure : <18 dB @ 0 dB <18 dB @ 0 dB <20 dB @ 0 dB <9.5 dB @ 16 dB <9.5 dB @ 16 dB <11 dB @ 16 dB BNC (50 or 75 Ω), Type "F", SMA Connectors **RF** Connectors: BNC, 50 or 75 Ω), Type "F" 50  $\Omega$  or 75  $\Omega$ 50 Ω or 75 Ω Impedance: 50  $\Omega$  or 75  $\Omega$ **AC Input Power:** Auto ranging 100-240 VAC, 50/60 Hz Local Control: Front Panel Keypad with LCD Display PC 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: 16 x 16 in 1RU: 1.75"H x 19"W x 18.5"D **Power Consumption:** 80W Weight: 14.5 lbs. Gross (boxed), 12.0 lbs. Net

\*Specifications may vary with connector type and system configurations. See data sheet for specific performance data.



## Quintech QRM 1000 **General Description:**

The QRM is a full fan-out RF matrix switch that can be fully populated as a 16x16. Available in 1 RU as 8x8, 8x16, 16x8 and 16x16. The 8x8 can be expandable to full 16x16 with purchase of access code. The QRM can be easily expanded to a maximum system size of 32x32 by adding additional modules. The QRM features Quintech's latest **Q-ROUTE<sup>™</sup>** and **Q-SENSE<sup>™</sup>** technology, which provides maximum reliability with signal path redundancy and auto re-route capabilities. The QRM's operating frequency range covers L-band, IF and Broadband. It also offers manual and AGC modes. It is controllable either locally via the front panel keypad or remotely over Ethernet and is compatible with most monitoring and control systems.

### Features & Benefits:

- Compact Design 16x16 in 1RU
- Operating Frequencies covers Broadband 50-1000MHz, IF 50-200MHz or L-band 950-2150MHz
- Full fan-out switching
- Manual Gain & AGC modes with a range of -15 dB to +16 dB in 0.5 dB step
- · Remotely controlled via web browser interface, Ethernet or Telnet via customer supplied PC
- Re-configure signal paths in milliseconds
- Q-ROUTE<sup>™</sup> Provides internal signal path redundancy by automatically re-routing around a failed signal path
- **Q-SENSE<sup>™</sup>** Provides external signal path redundancy by automatic switching to a back-up input signal, if alternate is selected<sup>2</sup>

#### **Applications:**

- Route multiple satellite feeds to multiple receivers or modems
- Automatically route signals for monitoring & control
- Monitor input levels to detect loss of signal conditions
- Re-configure test beds for compliance & interoperability testing
- Automatically connect back-up signal on primary feed loss

2Q-Sense not available on all configurations. Limited to a maximum of 16 inputs



