

QRM

16x16 Fan-Out RF Matrix Switch



QRM



General Description:

The **QRM** is a full fan-out RF matrix switch available in 1 RU as 8x8, 8x16, 16x8 and 16x16. The 8x8 can be easily expanded to full 16x16 with purchase of an access code. The **QRM** can be expanded to a maximum system size of 32x32 by adding additional modules. The **QRM** features Quintech's latest **Q-ROUTE™** and **Q-SENSE™** technology, which provides maximum reliability with signal path redundancy and auto reroute capabilities. The **QRMs** 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 1 RU
- Manual gain and AGC modes with a range of -15 dB to +16 dB in 0.5 dB 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:* | QRM L-Band | QRM IF | QRM Broadband |
|--------------------------------------|--|--|---|
| Operating Frequency: | 950-2150 MHz | 50-200 MHz | 5-1000 MHz |
| Configurations: | 8x8 up to 32x32 | 8x8 up to 32x32 | 8x8 up to 32x32 |
| Gain Range (manual mode): | -15 dB to +16 dB in 0.5 dB Steps | -15 dB to +16 dB in 0.5 dB Steps | -15 dB to +16 dB in 0.5 dB Steps |
| Impedance: | 75 Ω, or 50 Ω | 75 Ω, or 50 Ω | 75 Ω, or 50 Ω |
| Input P1dB: | 2 dBm | -3 dBm | -2 dBm |
| OIP3: | 10 dBm | 8 dBm | 8 dBm |
| Frequency Response: | ± 1.5 dB ± 0.4 dB Over Any 36 MHz Channel | ± 2.25 dB ± 0.6 dB Over Any 36 MHz Channel | ± 2 dB ± 0.6 dB Over Any 36 MHz Channel |
| Isolation (input-to-input): | 65 dB | 65 dB | 60 dB |
| Isolation (output-to-output): | 60 dB | 60 dB | 60 dB |
| Isolation (input-to-output): | 50 dB | 55 dB | 45 dB |
| RF Input Power: | -10 dBm to -70 dBm | -10 dBm to -70 dBm | -10 dBm to -70 dBm |
| RF Sensing and AGC Range: | -10 dBm to -50 dBm | -10 dBm to -50 dBm | -10 dBm to -50 dBm |
| Input Return Loss: | 14 dB | 14 dB | 14 dB |
| Output Return Loss: | 14 dB | 14 dB | 14 dB |
| Noise Figure: | <18 dB @ 0 dB Gain <9.5 dB @ 16 dB Gain | <18 dB @ 0 dB Gain <9.5 dB @ 16 dB Gain | <20 dB @ 0 dB Gain <11 dB @ 16 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: | 80 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.