## 64x64 L-Band RF Matrix Switch



QE3



## General Description:

The QE3 RF matrix switching system features a compact 64x64 RF Matrix in 6 RU with embedded web browser and touchscreen interface. The QE3 is a full fan-out, RF matrix switch, where any input can be routed to any or all outputs. The QE3 features Quintech's latest Q-ROUTE™ and Q-SENSE™ technology, which provides maximum reliability with signal path redundancy and auto reroute capabilities. The QE3 is highly scalable and can easily be expanded to a 1024x1024 system. Front panel hot-swappable component cards enable fast and easy replacement without any special tools or disconnecting any cables. The hot-swappable control cards, which operate independently offer the highest level of redundancy in control. The dual hot-swappable power supplies provide redundancy in powering. The RF level at the inputs and outputs is monitored to facilitate troubleshooting network interfaces. Manual and Automatic Gain Control (AGC) on all inputs allows the user to adjust input signal level for optimum performance.

## Features & Benefits:

- Operating frequencies cover 950-2150 MHz
- Compact modular design 64x64 in 6 RU, easily expandable to 1024x1024
- **Q-ROUTE**™ provides internal signal path redundancy by automatically rerouting around a failed signal path
- **Q-SENSE™** provides external signal path redundancy by automatically switching to a backup input signal, if signal level falls below user defined threshold
- Fast and easy hot-swap (less than 30 seconds) of all active cards from the front without using special tools or replacing cables
- Programmable AGC and attenuation on all inputs allows the user to adjust the input signal level for optimum performance

Specifications:*	QE3
Operating Frequency:	950-2150 MHz
Configurations:	64x64 (6 RU) up to 1024x1024
Gain Range (Manual Mode):	-12 dB to 18 dB in 0.5 dB Steps
Impedance:	75 Ω 50 Ω
P1dB:	0 dBm Min. @ Default Gain Setting
OIP3:	10 dBm
RF Input Power:	0 dBm Max.
Frequency Response:	± 1.5 dB ± 0.5 dB Over any 36 MHz Channel
Isolation (input-to-input):	65 dB Min.
Isolation (output-to-output):	60 dB Min.
Isolation (input-to-output):	50 dB Min.
RF Sensing and AGC Range:	-10 dBm to -50 dBm
Input Return Loss :	14 dB
Output Return Loss:	14 dB
Noise Figure:	22 dB @ Default Gain Setting
RF Connectors:	F-Type, BNC 75 $\Omega$ or 50 $\Omega$ , SMA 50 $\Omega$ , or Mixed
AC Input Power:	Autoranging 100-240 VAC, 50/60 Hz
Power Consumption:	650 W
Local Control:	Front Panel Touchscreen Display
PC Remote Control:	RS-232, RS-422/485, SNMP, TELNET or TCP/IP Via Customer Supplied PC
Software:	Basic PC Compatible Software and Command Protocol Web Browser Software
Mechanical:	64x64 in 6 RU: 10.5" H x 19" W x 25.25" D
Weight:	112 lbs Gross (boxed), 89 lbs Net

<sup>\*</sup>Specifications may vary with connector type. See individual specification sheet for specific performance data and system configurations. For IF frequencies (50-200 MHz) please contact Quintech.

