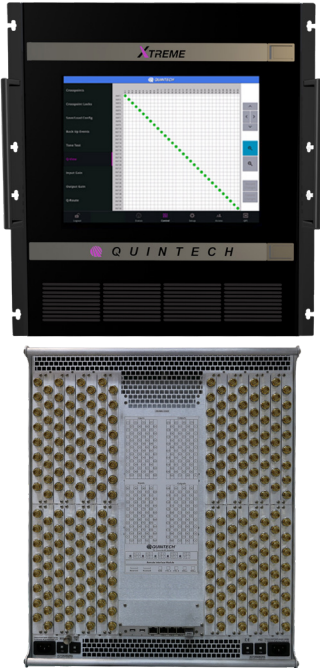# XTREME 256
256 Port Fan-Out L-Band RF Matrix Switch

XTREME 256

General Description:

The **XTREME 256** next generation L-band matrix switch features 256 ports in a compact 12 RU chassis. The **XTREME 256** is a full fan-out (distributive), non-blocking switch where an input can be routed to any or all outputs. The **XTREME 256** features an industry exclusive flexible matrix architecture (patented) that supports both symmetric and asymmetric configurations of 256 combined inputs and outputs in a single chassis. Asymmetric configurations such as 64x192, 96x160, and more can be implemented as well as the standard 128x128 configuration. It is designed for maximum reliability with redundant and hot-swappable power supplies, fans trays, and control cards plus RF redundancy. It is also designed for ease of maintenance with built-in self-test (BIST) capability and the ability to hot-swap all active components from the front of the unit. The **XTREME 256** is highly scalable and can easily be expanded up to 2048x2048 using multiple **XTREME 256** modules. Optional integrated expansion ports allow for large systems without using external expansion modules, significantly reducing system size and number of cables.

Features & Benefits:

- Compact modular design, 256 ports in 12 RU, easily expandable to 2048x2048
- Asymmetrical configurations up to 248 outputs in a single chassis
- Adjustable gain on inputs and outputs to allow RF performance optimization
- Option for fiber optic inputs
- Easy hot-swap of all active cards, power supplies, and fan trays from the front
- Redundant hot-swap control cards plus independent GUI control system
- Remotely controlled via web browser GUI interface, SNMP, TELNET or TCP/IP via customer supplied PC

Specifications:*[1]	XTREME 256
Configuration:	128 Inputs/128 Outputs
RF Connectors:	F-Type, BNC 75 Ω or 50 Ω, SMA, Mixed or Optical Input Receivers SC/APC or LC/APC
Impedance:	75 Ω or 50 Ω
Operating Frequency:	850-2450 MHz
Frequency Response:	± 1 dB Typ. ± 2 dB Max. ± .2 dB Typ. ± .5 dB Max. Over Any 40 MHz Channel
Input P1dB:	0 dBm
Noise Figure:	<20 dB @ 0 dB Input Gain
OIP3:	+10 dBm Min.
Input Return Loss:	14 dB Typ. 12 dB Min.
Output Return Loss:	16 dB Typ. 12 dB Min.
Isolation (input-to-input):	75 dB Typ. 65 dB Min.
Isolation (output-to-output):	75 dB Typ. 65 dB Min.
Isolation (input-to-output):	65 dB Typ. 55 dB Min.
Input Gain Range:	-17 dB to +13.5 dB in 0.5 dB Steps
Output Gain Range:	-14.5 dB to +33 dB in 0.5 dB Steps
RF Sensing:	-5 dBm to -50 dBm
Group Delay:	5 ns Max.
Switching Time:	125 ms
Local Control:	15" Front Panel Touchscreen
Remote Control:	SNMP, TELNET, TCP/IP; Web Browser Interface Via Ethernet, Remote Panel
Power Requirements:	100-250 VAC Autoranging, 50/60 Hz
Power Consumption:	525 W @ 120 VAC 650 W @ 240 VAC
Size:	12 RU Total Rack Space Required, 21" H x 19" W x 20.5" D to Rear Panel (22" Including Rear Handles)
Weight:	150 lbs