XTREME 256

256 Port Fan-Out L-Band RF Matrix Switch





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 selftest (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

XTREME 256	customer supplied i G
Specifications:*1	XTREME 256
Operating Frequency:	850-2150 MHz
Configuration:	128 Inputs/128 Outputs
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
Impedance:	75 Ω or 50 Ω
Input P1dB:	0 dBm
RF Sensing:	-5 dBm to -50 dBm
OIP3:	+10 dBm Min.
Frequency Response:	± 1 dB Typ. ± 2 dB Max. ± .2 dB Typ. ± .5 dB Max. Over Any 40 MHz Channel
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 Return Loss:	14 dB Typ. 12 dB Min.
Output Return Loss:	16 dB Typ. 12 dB Min.
Noise Figure:	<20 dB @ 0 dB Input Gain
Group Delay:	5 ns Max.
Switching Time:	125 ms
RF Connectors:	F-Type, BNC 75 Ω or 50 Ω , SMA, or Mixed
Power Requirements:	100-250 VAC Autoranging, 50/60 Hz
Power Consumption:	525 W @ 120 VAC 650 W @ 240 VAC
Local Control:	15" Front Panel Touchscreen
Remote Control:	SNMP, TELNET, TCP/IP; Web Browser Interface Via Ethernet, Remote Panel
Mechanical:	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

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

¹Specifications valid at unity gain (Input gain = 0 dB, Output gain = 0 dB)

