

XTREME 80

80 Port Fan-Out Broadband RF Matrix Switch



XTREME 80

General Description:

The **XTREME 80** next generation Broadband matrix switch features 80 ports in a compact 2 RU chassis. The **XTREME 80** is a full fan-out (distributive), non-blocking switch where an input can be routed to any or all outputs. The **XTREME 80** features an industry exclusive flexible matrix architecture (patented) that supports both symmetric and asymmetric configurations of 80 combined inputs and outputs in a single chassis. Asymmetric configurations such as 16x64, 24x40, and more can be implemented as well as the standard 32x32 configuration. Optional 13/18V, 22 kHz tone LNB power is available on all input ports. The **XTREME 80** is designed for maximum reliability with redundant power and control cards.

Features & Benefits:

- 50-1000 MHz frequency range
- Compact modular design up to 80 ports in 2 RU chassis
- Asymmetrical configurations up to (32x32, 20x48, 32x48, 40x24, 24x40, 60x20, and 16x64) in a single chassis
- LNB power 400 MA per input 13/18 V with 22 KHz tone
- Adjustable gain and attenuation on all inputs and outputs allows the user to adjust the RF level for optimum performance
- Fast and easy hot-swap (less than 30 seconds) of any active cards

Specifications:*	XTREME 80 Broadband RF Matrix Switch
As Configured:	32x32 Fully Populated
RF Connectors:	F-Type, BNC 75 Ω or 50 Ω, SMA, Mixed
Operating Frequency:	50 - 1000 MHz
Frequency Response: Default Gain: typically Centered @ 0 dB	+/- 4 dB
Any 36 MHz:	+/- 1 dB
Input P1dB:	
Default Gain:	2 dBm min
Noise Figure:	
Default Gain:	16 dB max
OIP3:	
Default Gain:	10 dBm min
Input Return Loss:	14 dB min
Output Return Loss:	14 dB min
Isolation:	
Input to Input:	70 dB min
Output to Output:	70 dB min
Input to Output:	55 dB min
Input Gain Range:	-19.5 to +12 dB in .5 dB steps
Output Gain Range:	-15.5 to +16 dB in .5 dB steps
RF Sensing Range:	-50 to 0 dBm
AGC Tracking Range:	-40 to -10 dBm setpoint
Switching Speed:	150 mS per crosspoint typical * <5 uS from break to make
Maximum Input Power: (No Damage)	20 dBm (30 VDC max on any port) Optical: +10 dBm (Wavelength 900-1650 nm)
Group Delay Variation:	5nS
Optical Input Specifications:	N/A

Physical:	
Dimensions:	2 RU (3.5" H x 19" W x 23.25" D)
Weight:	34 lbs. gross (boxed) 28 lbs. net
Certifications:	CE, TUV NRTL, FCC Part 15

**Typical refers to expected product performance that is useful in application of the product but is not covered by the product warranty

Control	
Local Control:	
Front Panel 2.2" LCD Display with Rotary Knob	
Remote Control:	
10/100/1000 BaseTx Ethernet Port to Web Server Controller	
Independent 10/100 BaseTx Ethernet Ports to each QPE Controller	
SNMP	v2c, v3
TCP/IP	Quintech 2.15 Protocol (Port 9100)
Web Server	
Secure Web Server with Custom SSL Certificate	
TELNET with option to disable	
Macro Scripting Language to Automate Changes and Monitoring	
XR Bus Expansion Standard	
Optional Ethernet Expansion	
NTP Time Client	
Alarms and Logging:	
SNMP Traps on Status Change	
SNMP Trap on Crosspoint Change	
SysLog, SQL, or CSV Format Log File	
Q-Sense:	
Primary and Backup Input Pairs: Backup is automatically switched if the Primary Input falls below the threshold level.	
Power and Cooling Requirements:	
AC Input Range:	100-240 VAC Autoranging 50/60 Hz 5A max
Hot-Swappable Redundant Supplies with Separate AC Inlets	
Power Consumption:	165 W
Fan:	Hot swappable by replacing front door
Matrix and Input, Output RF Modules:	Hot Swappable
Environmental Parameters:	
Operating Temperature:	0 to 50° C
Storage Temperature:	-10° C to 70° C
Humidity:	up to 95% RH non-condensing
Altitude:	10,000 feet AMSL