

# XTREME 32

## 32 Port Fan-Out Broadband RF Matrix Switch



**XTREME 32**

**General Description:**

The **XTREME 32** Dual Band matrix switch is a full fan-out (distributive) non-blocking signal management solution that routes an input to any or all outputs. The design features an industry exclusive architecture that supports both symmetric and asymmetric configurations of 32 combined inputs and outputs in a compact 1 RU chassis. Hot-swappable redundant power supplies, I/O Modules, and a field replaceable cooling fan provide maximum reliability.

**Features & Benefits:**

- 50-1000 MHz operating range
- Flexible matrix configurations (16x16, 4x28, 8x24)
- Optional LNB power 400 mA per Input 13/18 V with 22 kHz tone
- Adjustable input and output gain
- Redundant hot-swappable power supplies
- Hot-swappable input and output adapters
- Dual gigabit ethernet ports
- Field replaceable cooling fan

Specifications:*	XTREME 32 Broadband RF Matrix Switch
<b>As Configured/ Expandable to:</b>	8x16 (16X16)
<b>RF Connectors:</b>	F-Type, BNC 75 Ω or 50 Ω, SMA Mixed
<b>Operating Frequency:</b>	50 - 1000 MHz
<b>Frequency Response: Default Gain: typically Centered @ 0 dB</b>	+/- 3 dB
<b>Any 36 MHz:</b>	+/- .8 dB
<b>Input P1dB:</b>	
<b>Default Gain:</b>	0 dBm min
<b>Max Input Gain:</b>	-10 dBm typical *
<b>Noise Figure:</b>	
<b>Default Gain:</b>	14 dB max
<b>Max Input Gain:</b>	10 dB typical *
<b>OIP3:</b>	
<b>Default Gain:</b>	9 dBm min
<b>Input Return Loss:</b>	14 dB min
<b>Output Return Loss:</b>	14 dB min
<b>Isolation:</b>	
<b>Input to Input:</b>	60 dB min
<b>Output to Output:</b>	60 dB min
<b>Input to Output:</b>	55 dB min
<b>Input Gain Range:</b>	-19.5 to 12 dB in .5 dB steps
<b>Output Gain Range:</b>	-15.5 to 16 dB in .5 dB steps
<b>RF Sensing Range:</b>	-50 to 0 dBm
<b>AGC Tracking Range:</b>	-50 to -10 dBm setpoint
<b>Switching Speed:</b>	150 mS per crosspoint typical * <2 uS from break to make
<b>Maximum Input Power: (No Damage)</b>	20 dBm (30 VDC max on any port)

Physical:	
<b>Dimensions:</b>	1 RU (1.75" H x 19" W x 18.5" D)
<b>Weight:</b>	14 lbs. gross (boxed), 11.2 lbs. net
<b>Certifications:</b>	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	
<b>Local Control:</b>	
Front Panel 2.2" LCD Display with Rotary Knob	
<b>Remote Control:</b>	
Dual 10/100/1000 Base Tx Ethernet Ports	
<b>SNMP</b>	v2c, v3
<b>TCP/IP</b>	Quintech 2.15 Protocol (Port 9100)
<b>Web Server</b>	
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	
<b>Q-Sense:</b>	
Primary and Backup Input Pairs: Backup is automatically switched if the Primary Input falls below the threshold level.	

Power and Cooling Requirements:	
<b>AC Input Range:</b>	100-240 VAC Autoranging 50/60 Hz 5A max
Hot-Swappable Redundant Supplies with Separate AC Inlets	
<b>Power Consumption:</b>	100 W typical, 200 W with LNB option
<b>Fan:</b>	Long-life ball bearing fan (field swappable)
<b>Input and Output RF Modules:</b>	Hot Swappable

Environmental Parameters:	
<b>Operating Temperature:</b>	0 to 50° C
<b>Storage Temperature:</b>	-10° C to 75° C
<b>Humidity:</b>	20 % to 90% non-condensing
<b>Altitude:</b>	10,000 feet AMSL