XTREME 256

Telemeter Electronic

256 Port L-Band Matrix Switch

The ***XTREME 256*** defines the ***next generation of L-band matrix switching systems featuring 256 ports in a compact 12 RU chassis.*** The system is a full fan-out, non-blocking L-band RF Matrix Switch, whereas any input can be routed to any or all outputs.

Advanced RF design and power management methods allow the ***XTREME 256*** to achieve *industry leading gain flatness and linearity* for maximum RF performance while **cutting power consumption by up to 80%**. The system brings **expansion by reduction** and allows the user to minimize rack unit (RU) space requirements with its highly scalable packaging. The switch features a flexible matrix architecture (patent pending) that supports a variety of large symmetric such as 128x128 or ***industry exclusive asymmetric configurations*** such as 48x208, 64x192, 160x96 all in a single chassis. The ***XTREME 256*** also supports multichassis architecture expansion up to 2048x2048.

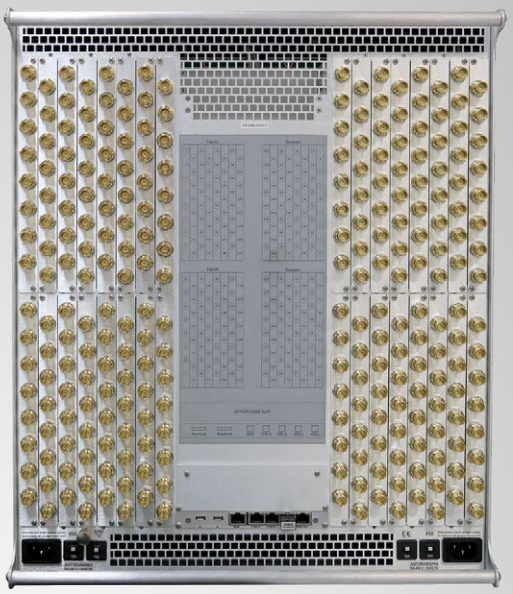
Other large configuration legacy matrix switching systems literally require kilometers of coaxial cable and thousands of watts of power to operate. Using built-in splitter/combiner technology, the ***XTREME 256*** offers system sizes of 16x496 to 256x256 without use of external expansion modules. Because system size does matter, the switch liberates any legacy system's **RU footprint by as much as 75%** and the number and **length of cables and connections by up to 97%.**

Redundancy, resilience, and built in flexibility allow the ***XTREME 256*** to achieve ***industry leading gain flatness and linearity*** for maximum RF performance while **cutting power consumption by up to 80%.** The system is designed with self-test diagnostics and tone generation that allow a fault to be immediately identified, isolated and seamlessly corrected.

Multiple matrix control options include an integrated 15" touch-screen monitor on the front panel. The system can be controlled either locally via the integrated touch screen monitor, or remotely using a PC web browser GUI interface or over TCP/IP. All hot-swappable component cards, independent Ethernet control cards and redundant power supplies are easily accessible from the front panels.

Features & Benefits

- 850-2150 MHz frequency range
- ***Extremely flat over any 40 MHz channel (+/- 0.2 dB typical)***
- Compact modular design – 256 ports in 12U, easily expandable to 2048 x 2048
- Can be configured for up to 248 outputs in a single chassis
- Adjustable gain and attenuation allows the user to adjust signal levels for optimum performance
- Touch Screen Interface & Embedded Web GUI Interface
- *Q-ROUTE*™ provides a dedicated internal signal path redundancy
- Fast and easy hot-swap (less than 30 seconds) of all active cards
- 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
- PC compatible operating software and protocol included



Specifications:*[1]

Operating Frequency:	850-2150 MHz
Input Gain Range (manual mode):	-20 dB to +16 dB in 0.5 dB steps
Output Gain Range	-19.5 dB to +28 dB in 0.5 dB steps
Impedance:	50 or 75 Ω
P1dB:	-3 dBm min.[3]
OIP3:	+7 dBm min.
RF Sensing:	-5 dBm to -50 dBm
Frequency Response:	+/- 2.0 dB max., +/-1.0 dB typ.
	+/- 0.5 dB max. +/- 0.2 dB typ. over any 40 MHz channel
Isolation (input-to-input):	65 dB min. 75 dB typ.
Isolation (output-to-output):	65 dB min. 75 dB typ.
Isolation (input-to-output): [2]	55 dB min. 65 dB typ.
Input Return Loss:	12 dB min.
Output Return Loss:	12 dB min.
Noise Figure:	<25 dB @ 0 dB gain
Configuration:	128 inputs / 128 outputs
RF Connectors:	F, BNC 75 Ω, BNC 50 Ω, SMA; Others by request
Power Requirements:	100 to 240 VAC autoranging, 50/60 Hz
Power Consumption:	525W @ 120 VAC 128x128
	675W @ 240 VAC 128x128
Local Control:	15” Front panel touchscreen
Remote Control:	SNMP, TELNET, TCP/IP; Web GUI
Mechanical:	12 RU
Weight:	150 lbs.

1 Specifications valid at unity gain
2 Adjacent paths should be properly terminated when measuring input-to- output isolation
3 Higher P1dB and OIP3 options available
*All product designs and specifications subject to change without notice

0511016

Telemeter Electronic

Germany

Telemeter Electronic GmbH
Joseph-Gaensler-Str. 10, 86609 Donauwoerth
Phone +49 906 70693-0, Fax +49 906 70693-50
info@telemeter.de, www.telemeter.info

Switzerland

Telemeter Electronic GmbH
Romanshornerstrasse 117 ,8280 Kreuzlingen
Phone +41 71 6992020, Fax +41 71 6992024
info@telemeter.ch, www.telemeter.info

Czech Republic

Telemeter Electronic s.r.o.
České Vrbné 2364, 370 11 České Budějovice
Phone +420 38 530637, Fax +420 38 5510124
info@telemeter.cz, www.telemeter.info