

NEXUS-R

Relay Based Blocking Matrix Switching System



General Description:

The NEXUS-R 32X32 is a passive, bidirectional, blocking matrix switching system that provides a complete 32x32 matrix in a single 12 RU box. The use of low-loss miniature switching relays minimizes any effect on signals passing through the matrix. The unit uses latching relays that will retain the RF path in the event of power failure. All channels can be switched in 30 milliseconds. It features broadband operation from DC to 2.8 GHz and is perfect for testing wireless communication technologies such as LTE, 4G, and WiMax. All active components, including RF matrix cards and power supply, are field replaceable. Multiple modules can be combined to create larger matrices.

Features & Benefits:

- Latching relays ensure cross points remain connected upon loss of power.
- All active components, including RF matrix cards and power supply, are field replaceable.
- Multiple modules can be combined to create larger matrices.

*Specifications:	NEXUS-R
Operating Frequency:	DC – 2.8 GHz
Matrix Type:	Passive Bidirectional Blocking
Switching Technology:	Miniature RF Relay
Impedance:	50 Ω
Connector Type:	N
Maximum Input RF Power:	50W (47 dBm) at 2.5 GHz, 20C
Maximum Hot Switch RF Power:	10W (40 dBm) at 2.5 GHz, 20C
Total RF Power into 32 Channels:	150W CW, 20C
Insertion Loss:	11dB max @ 2.8 GHz
Amplitude Matched Channel-to-Channel:	±1dB max @ 2.8 GHz
Return Loss:	14 dB typical, 11 dB minimum
Isolation (any configuration):	90 dB min.
Switching Speed:	< 30 msec/crosspoint
Switch Cycles to EOL:	>10 ⁶ (1 Million)
Power Requirements:	100-240 VAC auto-ranging, 50/60 Hz
Power Consumption:	< 100 W
Local Control:	Front panel keypad with LCD display
Remote Control:	Ethernet Port; TELNET or TCP/IP via customer-supplied control system, XR Bus for expansion
Software:	Matrix Control Program or Web Interface (Windows)
Mechanical:	12 RU (21" H x 19" W x 25.25" D including rear handles)
Mounting:	Handles and rack mounts attached to front or rear of box
Weight:	119 lbs. gross (boxed), 100 lbs. net

