

# NEXUS-4

## 6 GHz Bi-Directional RF Attenuator Matrix Switch



NEXUS-4



**General Description:**

The **NEXUS-4** is a bi-directional fully non-blocking 32x32 RF matrix switching system that can route any input ports to any output ports in a 6 RU chassis. With the frequency range of 400 MHz to 6 GHz and the capability of expanding to 256x256, it enables large scale wireless testing that involves many MIMO base stations and devices. The built-in programmable attenuators and efficient automation interface provide ease-of-use testing of signal fade and emulation of mobility scenarios. It can dramatically increase lab efficiency by eliminating manual patch panel and cabling as it can be remotely reconfigured for different test setups consistently in seconds. The utilization of **NEXUS-4** RF matrices will expand your testing capabilities, improve ROI of lab instruments, and reduce time to market.

**Features & Benefits:**

- 400 to 6000 MHz frequency range covering all major wireless technologies
- Support 32x32 RF ports in 6 RU with modular design expandable to 32x128
- Solid state switching and attenuation for consistent, repeatable and glitchless performance; reconfigure any test setup in seconds
- Fully non-blocking splitting and combining that supports MIMO testing
- Emulate free space incremental path loss of 0 to 60 dB
- High power handling of up to 30 dBm
- Management software **Q-LAAMP** enables resource and time allocation for high lab efficiency

Specifications:*	NEXUS-4		
<b>Operating Frequency:</b>	400-700 MHz	700-4000 MHz	4000-6000 MHz
<b>Configuration:</b>	Up to 32 Port A/32 Port B in a Single 6 RU Chassis		
<b>Matrix Type:</b>	Passive Bi-directional, Fully Non-blocking		
<b>Switching Technology:</b>	Solid State		
<b>Impedance:</b>	50 Ω		
<b>OIP3:</b>	60 dBm Min.		
<b>P1dB:</b>	40 dBm Min.		
<b>Fixed Attenuation:<sup>1</sup></b>	37 dB Typical	45 dB Max.	46 dB Typical
<b>Variable Attenuation (at Each Cross Point):</b>	0 to 60 dB Attenuation in 0.5 dB Steps		
<b>Isolation Port A to Port A:</b>	100 dB Single Connection, 50 dB Multiple Connections		
<b>Isolation Port B to Port B:</b>	80 dB Single Connection, 50 dB Multiple Connections		
<b>Isolation Port A to Port B:</b>	100 dB		
<b>On/ Off Isolation:</b>	70 dB Min.	70 dB Min.	65 dB Min.
<b>Return Loss:</b>	10 dB	14 dB	10 dB
<b>No Damage Signal Level:</b>	+40 dBm Max.		
<b>RF Connectors:</b>	N-type, SMA, QMA, TNC, 4.3-10		
<b>Power Requirements:</b>	100-240 VAC Autoranging, 50/60 Hz		
<b>Power Consumption:</b>	63 W		
<b>Local Control:</b>	Front Panel 2.2" LCD Display with Rotary Switch Joystick		
<b>Remote Control:</b>	Ethernet, TELNET, SNMP, or TCP/IP Via Customer Supplied Control System, XR Bus for Expansion		
<b>Software:</b>	Embedded Web Server and API Protocol, Fast Ethernet Option, <b>Q-LAAMP</b> Option		
<b>Mechanical:</b>	6 RU: 10.5" H x 19" W x 25" D		
<b>Weight:</b>	117 lbs in 32x32 Configuration		
<b>Certifications:</b>	FCC Part 15, CE, NRTL, TUV		

\*All product designs and specifications subject to change without notice. See individual specification sheet for specific performance data.