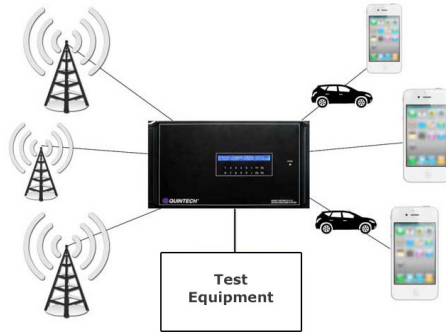


# NEXUS-3

## 3 GHz Bi-Directional RF Attenuator Matrix Switch



NEXUS-3



### General Description:

The **NEXUS-3** is a bi-directional fully non-blocking matrix switching system that can accommodate 32x32 ports in a compact 6 RU chassis. The matrix supports MIMO connections, e.g. any of the 32 ports of A or B can be routed to any or all of the 32 ports of B or A. It provides continuous operation over the frequency range of 700 to 2800 MHz and is ideal for testing wireless communication technologies for 4G (LTE, HSPA+) and beyond. Built-in programmable attenuators provide ease-of-use testing of signal fade and emulation of mobility and handoff testing scenarios. Test system configurations can be remotely reconfigured and consistently reproduced in minutes, eliminating the need for time consuming manual patch panel changes that can lead to RF signal loss and unpredictable results. Utilization of the **NEXUS-3** will improve test cycle rotation times and speed new products time to market.

### Features & Benefits:

- Solid state switching for consistent, repeatable and reliable performance
- Compact 6 RU module fits up to 32x32 RF ports
- Fully non-blocking (splitting and combining)
- Emulates free space and supports MIMO testing
- 0 to 60 dB attenuation per path in 1 dB steps
- Isolation  $\geq$  80 dB
- High power handling of 10 watts

Specifications:*	NEXUS-3
Operating Frequency:	700-2800 MHz
Configuration:	Up to 32 Port A/32 Port B in a Single 6 RU Chassis
Matrix Type:	Passive Bi-directional, Fully Non-blocking
Switching Technology:	Solid State
Impedance:	50 $\Omega$
OIP3:	60 dBm Min.
P1dB:	40 dBm Min.
Fixed Attenuation:	45 dB Max. @ 2800 MHz
Variable Attenuation (at each cross point):	0 to 60 dB Attenuation in 1 dB Steps
Isolation Port A to Port A:	80 dB Single Connection, 50 dB Multiple Connections
Isolation Port B to Port B:	80 dB Single Connection, 50 dB Multiple Connections
Isolation Port A to Port B:	100 dB Min.
On/Off Isolation: <sup>1</sup>	100 dB Min.
Return Loss:	15 dB Typ. 10 dB Min.
No Damage Signal Level:	+40 dBm Max.
RF Connectors:	N-type, SMA, QMA, TNC, 4.3-10
Power Requirements:	100-240 VAC Autoranging, 50/60 Hz
Power Consumption:	50 W
Local Control:	Front Panel Keypad with LCD Display
Remote Control:	Ethernet, TELNET, SNMP, or TCP/IP Via Customer Supplied Control System, XR Bus for Expansion
Software:	Embedded Web Server and API Protocol
Mechanical:	6 RU: 10.5" H x 19" W x 25" D
Weights:	100 lbs in 32x32 Configuration
Certifications:	CE, NRTL/TUV, FCC Part 15

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

<sup>1</sup>Includes insertion loss of unit. The ON/OFF difference is 65 dB minimum.