

NEXUS Wi-5G

RF Matrix Switch for Wireless Network Testing Up To 5.8 GHz

General Description

The **NEXUS Wi-5G** is a wideband 600 MHz to 5.8 GHz bi-directional RF Attenuator Matrix Test System which enables testing of 2x2 to 8x8 MIMO connections. Integrated fixed attenuation and (64) 0 to 60 dB programmable attenuators provide up to 90 dB of total attenuation per connection. The **NEXUS Wi-5G** can connect any input port to one or all output ports and any output port to one or all input ports using integrated wideband splitters and combiners. Unused connections can be turned off using internally terminated 100 dB isolation switches. The **NEXUS Wi-5G** enables interoperability, coexistence and testing of current and emerging standards. The matrix is used for roaming, handover, beam forming, wireless mesh network test and validation of network equipment. Its frequency range covers 2G/3G/4G/LTE/VoLTE/802.11x WiFi/MIMO. Circuit-switched fallback testing can be conducted in a controlled environment isolated from commercial signals, emulation of mobility scenarios, inter-band carrier aggregation and WiFi interference tests are easily configured. Regression testing can be completed in reduced time enhancing laboratory ROI.

The **NEXUS Wi-5G** used in conjunction with Quintech's proprietary **Q-LAAMP**[®] software management platform provides a ready-to-use test system with an intuitive GUI and user configurable RF fading applications.

Features & Benefits

- 600 MHz to 5.8 GHz continuous frequency range covering all major wireless and WiFi technologies
- 64 Total 0 to 60 dB programmable attenuators in 0.5 dB steps
- High power handling up to 30 dBm
- Integrated splitters and combiners support up to 8x8 MIMO testing

Applications

- Transceiver testing
- Network level mobility testing
- 2G/3G/4G/802.11 WiFi/LTE-U interoperability and benchmarking testing
- VoLTE interoperability and circuit-switched fallback testing
- 2 to 8 antenna MIMO testing
- WiFi access point interference testing
- Military communications radio testing

Specifications*	NEXUS Wi-5G
Operating Frequency:	600-6000 MHz
Configuration:	4x8, 8x8
Matrix Type:	Passive Bi-Directional, Non-Blocking, Full Fan-In/Fan-Out
Switching Technology:	Solid State
Impedance:	50 Ω
OIP3:	>60 dBm
P1dB:	>36 dBm
Fixed Attenuation:	35 dB @ 6 GHz
Variable Attenuation:	0 to 60 dB Attenuation in 0.5 dB Steps
Isolation (A to A):	100 dB Single Connection, 45 dB Multiple Connections
Isolation (B to B):	80 dB Single Connection, 45 dB Multiple Connections
Isolation (A to B):	100 dB
On/Off Isolation: ¹	100 dB
Return Loss:	14 dB Min.
No Damage Signal Level:	+36 dBm Max.
RF Connectors:	N-type, SMA, QMA, TNC, 4.3-10
Power Requirements:	100-240 VAC Autoranging, 50/60 Hz
Power Consumption:	20 W
Remote Control:	Ethernet, TELNET, SNMP, or TCP/IP Via Customer Supplied Control System, XR Bus for Expansion
Software:	Fast Ethernet API Protocol, Embedded Web Server and API Protocol, Q-LAAMP Option
Mechanical:	3 RU 5.25" H x 19" W x 25.25" D
Weight:	40 lbs. Gross (boxed), 30 lbs. Net

*All product designs and specifications subject to change without notice. See individual specification sheet for specific performance data.
¹70 dB Min. normalized to insertion loss of path.