

# NEXUS-R

## High Power Bi-Directional RF Blocking Matrix



NEXUS-R

### General Description:

The **NEXUS-R** is a passive bi-directional blocking matrix switch that can relay 32 A ports to 32 B ports. It is designed to handle high power up to 50 W for direct connection to base stations. Based on latching relay switching technology, it retains the connections even upon power loss. Quintech's proprietary design minimizes the return signal and insertion loss through the switch while maximizing the isolation between ports. Its low loss and distortion preserves signal integrity for performance testing while the high isolation prevents crosstalk between test equipment. As a result, the **NEXUS-R** has superior RF performance and can be used in highly demanding applications such as base station beam forming testing.

### 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   |
| Connector Type:                       | N-Type   |
| Matrix Type:                          | Passive Bi-directional Blocking  |
| Switching Technology:                 | Miniature RF Relay   |
| Impedance:                            | 50 Ω   |
| Maximum Input RF Power:               | 50 W (47 dBm) at 2.5 GHz, 20C  |
| Maximum Hot Switch RF Power:          | 10 W (40 dBm) at 2.5 GHz, 20C  |
| Total RF Power into 32 Channels:      | 150 W CW, 20C  |
| Amplitude Matched Channel-to-Channel: | ±1 dB Max. @ 2.8 GHz   |
| Isolation (Any Configuration):        | 90 dB Min.   |
| Insertion Loss:                       | 11 dB Max. @ 2.8 GHz   |
| Return Loss:                          | 14 dB Typ., 10 dB Min.   |
| Switching Speed:                      | <30 Millisecond/Crosspoint   |
| Switch Cycles to EOL:                 | >10 <sup>6</sup> (1 Million)   |
| Power Requirements:                   | 100-240 VAC Autoranging, 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:                             | Embedded Web Browser Interface   |
| Size:                                 | 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:                               | 190 lbs Gross (Boxed), 107 lbs Net   |

\*Specifications may vary with connector type. See individual specification sheet for specific performance data.