

Bi-Directional Full Fan-In/Fan-Out Matrix Switching System

General Description:

The **QRB300032X32CQ000** is a passive, bi-directional, full fan-in/fan-out matrix switching system that provides a complete 32x32 matrix in a single 6 RU box. The matrix is bi-directional in that any of the 32 ports A or B can be routed to any or all of 32 possible ports B or A. It provides continuous operation over the frequency range 700-2800 MHz and is ideal 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. The **QRB** provides up to 60 dB of attenuation at each crosspoint and RF sensing at one set of ports (50 dB range).

Specifications:

Operating Frequency:	700-2800 MHz
Matrix Type:	Passive Bi-Directional, Non-Blocking, Full Fan-In/Fan-Out
Switching Technology:	Solid State
Return Loss:	15 dB typical, 12 dB minimum for any route configuration
Insertion Loss:	43 dB typical, 45 dB max. @ 2800 MHz & 0 dB attenuation
Impedance:	50 Ω
IIP³:	+60 dBm min.
P1dB:	+40 dBm
Attenuation (at each crosspoint):	0 to 60 dB attenuation in 1 dB steps
RF Connectors:	QMA, 50 Ω
Isolation (A to A):	80 dB different Port B 50 dB same Port B
Isolation (B to B):	80 dB different Port A 50 dB same Port A
Isolation (output-to-output, different input):	80 dB min.
On/Off Isolation*:	100 dB min.
Isolation (input-to-output):	100 dB
RF Sensing Range (Measured at Port A):	+30 dBm to -20 dBm
No Damage Signal Level:	+40 dBm maximum
Configuration:	Up to 32 Port A / 32 Port B in a single 6 RU chassis
Power Requirements:	100-240 VAC autoranging, 50/60 Hz
Power Consumption:	50 W
Local Control:	Front panel keypad with LCD display
Remote Control:	ETHERNET Port, TELNET, SNMP, or TCP/IP via customer-supplied control system, XR Bus for expansion
Mechanical:	6 RU (10.5" H x 19" W x 25.25" D) (including rear handles)
Weight:	119 lbs. gross (boxed), 95.5 lbs. net
Certifications:	FCC Part 15



* Includes insertion loss of unit. The ON/OFF difference is 65 dB min.



Digisat International Inc.
4195 W. New Haven Ave., Suite 15
Melbourne, FL 32904
USA
+1-321-676-5250
Email: sales@digisat.org
<http://www.digisat.org>