

QFM 2500

QFM250016X16MGSJA000

Full Fan-In RF Matrix Switching Module

General Description:

The **QFM250016X16MGSJA000** is a full fan-in matrix switching module that is used with Quintech's QFM switching system. It allows any of 16 inputs carrying RF signals to be routed to any or all of 16 outputs and is where most of the signal crosspoints are specified/modified. The outputs of the QFM switching modules are typically distributed to the Output Modules, thus setting up the final stage of signal connections for the matrix system. Designed for systems with more than 16 outputs, the QFM250016X16MGSJA000 receives RF signals from the Input Module(s) and routes them to the appropriate Output Module(s). Q-ROUTE provides internal signal path redundancy by automatically re-routing around a failed signal path. Q-SENSE provides external signal path redundancy by automatic switching of back-up input signals. In addition, manual or automatic input level balancing allow the user to equalize varying input powers, while system gain enables power level control on a per output basis.

Specifications:

	L-Band	IF
Operating Frequency:	950-2150 MHz	50-200 MHz
Gain Range (manual mode):	-20 dB to +8 dB in 0.5 dB steps	-20 dB to +8 dB in 0.5 dB steps
Input Balancing (manual mode):	-12 dB to +4 dB in 0.5 dB steps	-12 dB to +4 dB in 0.5 dB steps
Impedance:	50 Ω	50 Ω
P1dB:	+2 dBm	0 dBm
OIP³:	12 dBm	10 dBm
RF Input Power:	-10 dB to -70 dB	-10 dB to -70 dB
RF Output Power:	-10 dBm	-10 dBm
Output AGC Level:	-10 dBm to -50 dBm	-10 dBm to -50 dBm
Frequency Response:	± 1.5 dB ± 0.4 dB over any 36 MHz channel	± 2 dB ± 0.6 dB over any 36 MHz channel
Isolation (input-to-input):	60 dB	65 dB
Isolation (output-to-output):	60 dB	60 dB
Isolation (input-to-output):	45 dB	45 dB
Input Return Loss:	13 dB	14 dB
Output Return Loss:	14 dB	14 dB
Noise Figure:	<23 dB @ 0 dB	<20 dB @ 0 dB
Configuration:	16 inputs / 16 outputs	
RF Connectors:	SMA, 50 Ω	
Power Requirements:	100-240 VAC autoranging, 50/60 Hz	
Power Consumption:	77 W	
Inter-Module Control Data:	XR Bus	
Mechanical:	1 RU (1.75" H x 19" W x 18.5" D)	
Weight:	14 lbs. gross (boxed), 11.5 lbs. net	
Certifications:	CE, NRTL/TUV, FCC Part 15	



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