

Specialists in RF techniques

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RR1003 HF Switch Matrix Non-Blocking Full Fan-out

The RR1003 is a series of HF Switch Matrices, which are all non-blocking and are configured as a full fan-out product. The products provide a very high dynamic range performance in a compact 4U high 19" rack mountable unit, featuring the latest design of feed-forward/feedback amplifier.

This unit provides independent access for thirty-two output channels to any of up to sixteen inputs, depending on the requirement. There are several control options available including, local control from a front panel display and keypad, remote control via RS232 or Ethernet (TCP/IP). The unit can also be powered by either AC mains or +24V DC.

The unit features a modular construction within a sealed enclosure accommodating a wide range of input/output combinations, and enabling expansion to be readily achieved. The unit is 19" rack mountable and can be supplied with rack mounting slides for ease of maintenance.



Specification		Parameter
Frequency Range		1-32MHz minimum (0.5-35MHz typ.)
Gain		0.5dB ±1.0dB
Noise Figure		6dB maximum
Number of Inputs x Outputs		16 x 32
Output Intercept Point	2nd Order (OIP2)	90dBm minimum
	3rd Order (OIP3)	45dBm minimum
VSWR Input/Output (50Ω)		1.5: 1 maximum
Isolation	I/P to I/P	60dB minimum
	I/P to O/P (ON/OFF)	70dB minimum
	O/P to I/P	45dB minimum
	O/P to O/P	35dB minimum (40dB typical)
Maximum Input Signal	CW	30dBm continuous
	Pulse	2kV, 1.6µs rise-time, 50µs duration
Control	Remote	RS232C standard, Ethernet optional
	Local	Front Panel Display and Keypad (optional)
Switching Time		10ms maximum
Power Supply		24Vdc @ 10A (230 & 115Vac opt.)
Connectors	RF	BNC socket
	Control	25-way D-type
	Power (dc)	AXR 3-pin plug
	Power (ac)	IEC plug (option)
Dimensions	Width	483mm, 19" rack mounting
	Depth	650mm maximum
	Height	177mm, 4U
Temperature	Operating	-10°C to +55°C
	Storage	-30°C to +70°C
Options		Alternative number of input combinations Standard AC Mains powered 100-230V Front Panel Local Control Facility Alternative Control Options (Ethernet TCP/IP)