

RR1030A IF DISTRIBUTION MATRIX

Features

The RR1030A series is a range of high input level, programmable, non-blocking, full fan-out intermediate frequency RF matrix routing systems. They can be configured to route any of 8 to 16 inputs to any number of 8 to 16 outputs. Only one input can be connected to a given output but many outputs may be connected to the same input (fan-out). These matrix routers feature low distortion for high operating input power levels and high damage levels for demanding satellite communications applications.

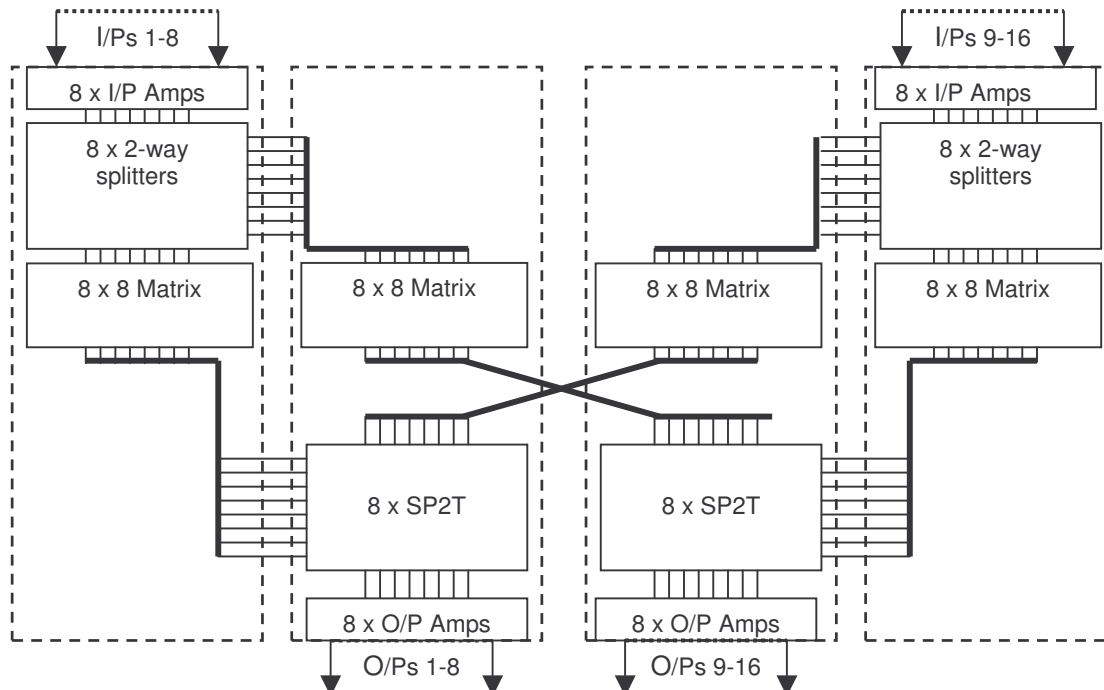
- Operating frequency ranges for IF (20-200 MHz)
- High cross-point packing density to take up less rack space.
- Improved system reliability through elimination of patch panel connections.
- Remote control via computer and local control via front panel keypad and display.
- Convenient switching of alternate signal sources to respond to changes in routing requirements.
- Solid-state switching elements to provide long and reliable service life.
- Installing a switching matrix allows the use of automated switching and scheduling to make the most efficient use of capital equipment.
- Additional controllers can be daisy-chained to the master for multipoint access to the matrix (option).
- Dual redundant dc power supply (with failure alarm) for maximum equipment availability to the system.
- Front panel LCD display provides convenient cross point identification.

Specifications:

Operating Frequency:	20-200 MHz
Characteristic Impedance:	50 ohm (75 ohm option)
Maximum Operating Input Power:	+3 dBm
Maximum Survivable Input Power:	+12 dBm
Insertion Gain/Loss:	0 ± 1 dB
Frequency Response:	0.7 dB max over any 70 MHz span (any input to single output)
1 dB Compression Input:	+13 dBm
3rd/2nd Order Output Intercept Point:	+25/40 dBm
Isolation (Input to Input):	≥ 60 dB
Isolation (Output to Output - different input):	≥ 60 dB
Isolation (Output to Output - common input):	≥ 50 dB

RR1030A IF Distribution Matrix (continued)

Isolation (Input to Output):	≥ 60 dB
Input Return Loss:	14 dB min., 20 dB typ.
Output Return Loss:	14 dB min., 14 dB typ.
Noise Figure:	15 dB max.
Power Required:	100-240 VAC, 50/60 Hz. single phase.
Power Consumption:	50 W (for 16x16 configuration)
Local Control:	Front panel keypad and LCD Screen
Remote Control (standard):	RS232 (25-way D-type) from customer's PC.
Remote Control Options:	RS422 (25-way D-type), RS485 (15-way D-type), IEEE 488 (GPIB), USB or TCP/IP (RJ45).
Available Configurations	8x8, 8x16, 16 x 16, 16x8,
Mechanical:	133 High (3U) x 483 Wide x 445 Deep (mm).
Standard Signal Connection:	BNC socket
Signal Connection Options	Type "F" or SMA connectors)
Power Connection	IEC socket
Block Diagram:	

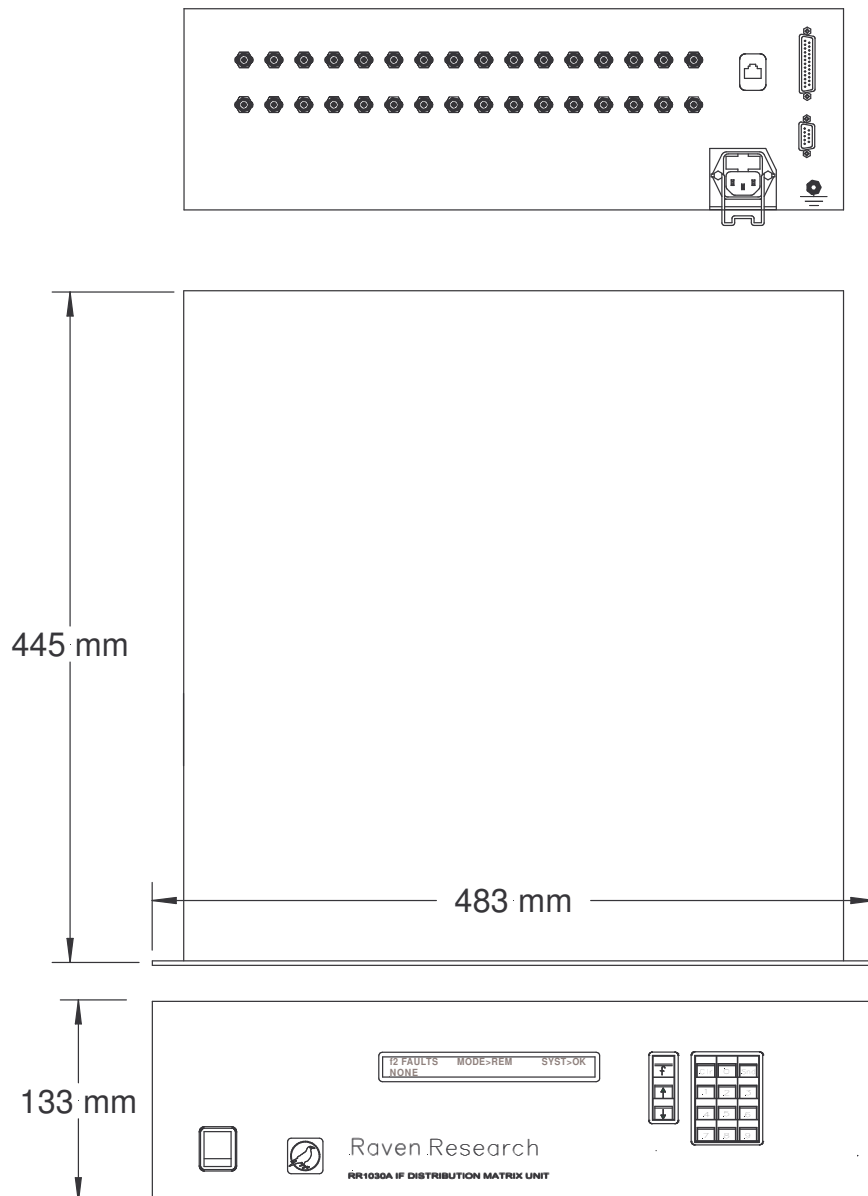


Specialists in RF techniques

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RR1030A IF Distribution Matrix (continued)

Outline Drawing:



RR1030A IF Distribution Matrix (up to 16 input x 16 output)