

# Model 3207

## 75 Ohm / 50 Ohm Solid State RF Matrix IF-band (20 MHz - 200 MHz)

### Key Features

75 Ohm / 50 Ohm Solid State Matrix  
Non-Blocking Full Fan-out:  
20 inputs by 24 outputs  
Local Control: LCD and Keypad (optional)  
Remote Control: ENET, or GPIB, or RS-232/RS-485

### Part Number

**3207 - 20X24 - \***

\* ENET or GPIB (option includes RS-232 / RS-485)

### Description

The 3207 Model is a non-blocking 75 Ohm (or 50 ohm upon request) full fan-out (any input connected to any output simultaneously) solid state switching system with an operating frequency band of 20-200 MHz. The matrix is configured with (20) inputs and (24) outputs housed in a 6U 19" rack chassis. Model 3207 consists of the following sub-assemblies:

- >> low noise amplifiers
- >> power dividers
- >> Ethernet and RS-232/RS-485 remote interface (default)
- >> manual (local) interface (optional)
- >> redundant power supply (optional)
- >> voltage monitoring board (optional)

With a modular approach, the sub-assemblies enable ease of installation and maintenance.

### Control Interfaces

Local control (manual control optional):

- >> 4x20 LCD and 3x6 pushbuttons

Remote Control:

- >> Default: LAN via TCP/IP protocol (ENET)
- >> Other control interfaces such as RS-232, RS-485, GPIB are available upon request.

### Special Features

- >> The power supply voltage and the I/O boards are monitored in a processor routine.
- >> The selected crosspoints as well as the voltage and I/O fault messages are displayed on the manual control module.
- >> A status string can be requested at any time via the control interface
- >> The unit is constructed using a modular approach utilizing sub-assemblies such that it enables the ease of installation and maintenance.



Photo: 3207-20X24-ENET

### Environment

Power Supply: 115 / 230 VAC, 47-63 Hz, redundant power supply (optional)  
Storage Temperature: -20 °C to +70 °C  
Operating Temperature: 0 °C to +40 °C  
Operating Humidity: 10-80% (non-condensing)  
EMC: EN61000-6-1 and EN61000-6-3

### Physical

Relay Type: Solid state switch internally terminated  
I/O Connector Type: BNC female (75 Ohm) / SMA-f (50 Ohm)  
Dimensions: 19" wide standard rack mount  
6U maximum height (5.25")  
20" maximum depth  
Front Panel Color: Gray

### RF Characteristics

Impedance	75 Ohm or 50 Ohm available
Operating Frequency	20-200 MHz
VSWR (max)	1.3:1
Isolation (min)	45 dB output / output (diff. inputs)
Crosstalk (min)	55 dB
Gain	0 dB +/- 1.0 dB
Gain Flatness (max.)	+/- 1.0 dB
Noise Figure (max)	18.0 dB
Input Level (max.)	-10 dBm
3rd Order Output Intercept Point (IP3) min	+10 dBm