

Model 3210

75 Ohm / 50 Ohm Solid State RF Matrix L-band (950 MHz - 2250 MHz)

Key Features

75 Ohm / 50 Ohm Solid State Matrix
Non-Blocking Full Fan-out:
16 inputs by 16 outputs expandable to 32 by 32
Local Control: LCD and Keypad (optional)
Remote Control: ENET, or GPIB, or RS-232/RS-485

Part Number

3210 - 16X16 - * expandable to **3210 - 32X32 - ***

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



Photo: 3210-16X16-ENET

Description

The 3210 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 of 950-2250 MHz. The matrix is configured with (16) inputs and (16) outputs housed in a 3U 19" chassis. Upon request, the solution can be expanded to a (32) inputs by (32) outputs matrix enclosed in a 6U chassis. Model 3210 consists of the following sub-assemblies:

- >> low noise amplifiers
- >> 8x8 matrix board
- >> 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)
- >> Options: RS-232, RS-422, RS-485, and GPIB (IEEE-488)

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.

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
I/O Connector Type: F female (75 Ohm) / SMA-f (50 ohm)
Dimensions: 19" wide standard rack mount
3U maximum height (5.25") *
20" maximum depth
Front Panel Color: Gray

* 6U for the expandable unit (32x32)

RF Characteristics

Impedance	75 Ohm or 50 Ohm available
Operating Frequency	950-2250 MHz
VSWR (max)	1.8:1
Isolation (min)	45 dB in/in 40 dB output / output (diff. inputs)
Crosstalk (min)	45 dB
Gain (typ)	1 dB +/- 1.0 dB
Gain Flatness (typ)	+/- 1.5 dB
Noise Figure (max)	13.0 dB
1 dB Compression Point	-7 dBm
3rd Order Output Intercept Point (IP3) min	+8 dBm
2nd Order Output Intercept Point (IP2) min	+20 dBm