

400 MHz RF Matrix

- ◆ **Configurable as 2x6, 2x12 or 2x36 RF Matrix**
- ◆ **400MHz Bandwidth**
- ◆ **Software Configurable—No Jumpers!**
- ◆ **Switches 30 Watts, 0.5 Amps and 125VAC**
- ◆ **High Density Coaxial Interfaces**
- ◆ **Excellent for Oscilloscope or Time Interval Counter Measurements**

Racal Instruments™ 1260-51 is ideal for high performance RF switching. Its 400MHz bandwidth makes the 1260-51 an excellent switch module for medium-speed digital, datacomm and most analog signals.

The 1260-51 is an excellent choice for switching high frequency signals to an oscilloscope or counter/timer. Its wide bandwidth ensures that the test equipment sees fast, transient signals. The 1260-51 is also ideal for switching high frequency signal sources, such as the Racal family of waveform synthesizers and signal generators, to the unit under test.

The 1260-51 consists of six, 2x6 matrices that may be combined into three, 2x12 or one, 2x36 matrix. The module automatically configures interconnection relays to achieve the path desired.

The 1260-51 provides a low noise switch path with excellent crosstalk and isolation. This performance allows the 1260-51 to switch signals in critical tests of amplifiers, receivers and other active devices.

Relay coil-current monitoring is available to provide confidence checking by assuring the user of proper relay operation.

The 1260-51 is controlled by the Option 01 Smart Control Module which is explained in detail on a separate data sheet. All 1260 series control features are available on the 1260-51.

1260-51 PRODUCT SPECIFICATIONS

Maximum Switching Power

62.5 VA, 30W

Maximum Switching Voltage

125VAC, 110VDC

Maximum Switching Current

0.5A AC

0.5A DC

Thermal EMF

<20uV

Insulation Resistance

High to Low >100 M Ω

High to Chassis >100 M Ω

Low to Chassis >100 M Ω

DC PERFORMANCE

Path Resistance

<1.5 Ω

AC PERFORMANCE (into 50 Ω)

Capacitance

Open Channel, Input to Ground

<150pF (typical)

Closed Channel, Input to Ground

<200pF (typical)

Bandwidth (-3dB, 50Ohms)

400MHz (2x6 Basic cell)

(typical 2x36 cell, 325MHz)

Insertion Loss

<3dB @ 400MHz

(2x6 Basic Cell)

Return Loss / VSWR

14dB @ 100MHz

12dB @ 200MHz (typical)

Crosstalk

<-40dB to 100MHz

Isolation

>60dB to 100MHz, Minimum

>80dB to 100MHz, Typical

Switching Time (Including Settling)

5msec max.

Temperature

Operating: 0° C to +55° C

Non-Operating: -40° C to +75° C

Humidity

95 \pm 5% RH non-condensing <30° C

75 \pm 5% RH >30° C

45 \pm 99 5% RH >40° C

Altitude

Operating: 10,000ft

Non-Operating: 15,000ft

Shock (Functional)

30g, 11msec, 1/2 Sine Wave

Vibration, Non Operating

0.013 inch double amplitude, 5-55Hz

VXIBUS INTERFACE DATA

Cooling Requirements

Airflow: 2.0 l/s

Backpressure: 0.05 mm H₂O

With Option 01S/T

Airflow: 3.0 l/s

Backpressure: 0.2 mm H₂O

Peak and Dynamic Current

	+24V	+5V	+5V w/Option 01
I_{Pm}	6mA*	400mA	2.8A
I_{Dm}	0mA	75mA	225mA

* per energized relay

Weight

3.2 lb (1.45 kg) without Opt. 01

3.5 lb (1.60 kg) with Opt. 01

Dimensions

C-size, Single-slot, VXIbus Module

MTBF

Without relays: \geq 240,000 hours

Life Expectancy

>500,000 operations at 30VDC, 1A

>100 million mechanical operations

Typical Programming Syntax


Programming syntax is in the form:

"<module address>.<channel>"

Example: CLOSE 1.0020,0030

This CLOSE statement will close channel number 1 on the 1260-51 module at card address 2.

Note: Module is supplied with one set of mating connectors. Additional connectors can be ordered using the part numbers shown below.

 The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and complies with European electrical safety standards.

ORDERING INFORMATION

MODEL/DESCRIPTION

Racal Instruments 1260-51, 400MHz RF Matrix

Option 01, Smart Card Module (installed)

Option 01T, Smart Card Module (installed)

Coax Pin for Model 1260-51

Coax Cable Assembly, 1GHz Cables, with Pins at Each End, 2ft. (-003, 6ft, -006, 12ft)

Crimp Tool for Coaxial Pin - Order Directly from Burndy Corp.

*One Option 01 must be ordered with switch card(s). Please specify the card on which Option 01 will be installed

PART NUMBER

407612

OPT-401901-005

OPT-407531-001

602220-900

407368-001

Order Direct

The EADS North America Defense Test and Services policy is one of continuous development, consequently the equipment may vary in detail from the description and specification in this publication.



EADS North America Defense Test and Services
1.800.722.2528/1.949.859.8999 sales@eads-nadefense.com