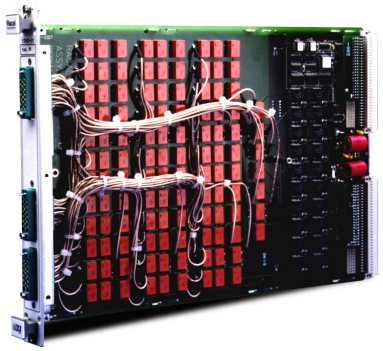

Racal Instruments™

1260-51

400 MHz RF Matrix

MATURE

The 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.

Key Features

- **Configurable as 2x6, 2x12 or 2x36 RF matrix**
- **400 MHz bandwidth**
- **Software configurable—no jumpers!**
- **Switches 30 W, 0.5 A and 125 VAC**
- **High density coaxial interfaces**
- **Excellent for oscilloscope or time interval counter measurements**

Product Information

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 our family of wave-form 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 automati-cally 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 Racal Instruments™ Option 01 message-based interface, or the Option 01T message-based and register-based interface, which are explained in detail on separate data sheets.

ASTRONICS TEST SYSTEMS

949.859.8999; 800.722.2528; atssales@astronics.com; www.astronicstestsystems.com

Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

Maximum Switching Power
- 62.5 VA, 30 W

Maximum Switching Voltage
- 125 VAC, 110 VDC

Maximum Switching Current
- 0.5 A AC
- 0.5 A DC

Thermal EMF
- <20 µV

Insulation Resistance
- High to Low >100 MΩ
- High to Chassis >100 MΩ
- Low to Chassis >100 MΩ

DC Performance

Path Resistance
- <1.5 Ω

AC performance (into 50 Ω)

Capacitance
- Open Channel, Input to Ground: <150 pF (typical)
- Closed Channel, Input to Ground: <200 pF (typical)

Bandwidth (-3 dB, 50 Ω)
- 400 MHz (2x6 Basic cell) (typical 2x36 cell, 325 MHz)

Insertion Loss
- <3 dB @ 400 MHz (2x6 Basic Cell)

Return Loss/VSWR
- 14 dB @ 100 MHz
- 12 dB @ 200 MHz (typical)

Crosstalk
- <-40 dB to 100 MHz

Isolation
- >60 dB to 100 MHz, Minimum
- >80 dB to 100 MHz, Typical

Interface

Peak and Dynamic Current

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

* per energized relay

Environmental

Switching Time (Including Settling)
- 5 ms max

Temperature
- Operating: 0° C to +55° C
- Non-Operating: -40° C to +75° C

Humidity
- 95 ±5% RH non-condensing <30° C
- 75 ±5% RH >30° C
- 45 ±5% RH >40° C

Altitude
- Operating: 10,000 ft
- Non-Operating: 15,000 ft

Shock (Functional)
- 30g, 11 ms, ½ Sine Wave

Vibration, Non Operating
- 0.013 in: double amplitude, 5 to 55 Hz

MTBF
- Without relays: ≥240,000 hrs

Life Expectancy
- >500,000 operations at 30 VDC, 1 A
- >100 million mechanical operations

Mechanical

Weight
- 3.2 lb (1.45 kg) without Opt 01/01T
- 3.5 lb (1.60 kg) with Opt 01/01T

Dimensions
- C-size, Single-slot, VXIbus Module

Cooling Requirements
- Without Option 01/01T
  - Airflow: 2.0 l/s
  - Backpressure: 0.05 mm H_2O
- With Option 01/01T
  - Airflow: 3.0 l/s
  - Backpressure: 0.2 mm H_2O

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

Ordering Information

Notes: Compatible smart controllers: A smart card must be installed in the left-most slot of a set of 1260-xx series switch cards. There are two options:

- Option 01: Native command set. For use in previously designed switching systems that used the Option 01.
- Option 01T: SCPI command set. For use in new systems and previously designed systems that used the Option 01T.

The 1260-51 is supplied with one set of mating connectors. Additional connectors can be ordered.

407612 : Racal Instruments™ 1260-51 (Mature)
400 MHz RF Matrix

Options and Accessories:

OPT-401901-005 : Racal Instruments™ Option 01, Smart Control Module installed (manual must be ordered separately; see below)

404820-005 : Racal Instruments™ Option 01, Smart Control Module (not installed) with manual

OPT-405108-001 : Racal Instruments™ Option 01T Smart Control Module installed (manual must be ordered separately; see below)

407531-001 : Racal Instruments™ Option 01T Smart Control Module (not installed) with manual

Order Direct : Crimp Tool for Coaxial Pin — Order Directly from Burndy Corp.