



# Racal Instruments™ 1260-16A

**MATURE**

High Density, 6A Power Switch Module

The Racal Instruments™ 1260-16A is a 64-channel, SPDT, high isolation; low crosstalk switch module designed for switching and routing sources such as AC and DC power supplies in automated test systems.

## Key Features

- 64 Channels of SPDT switching
- Switching for power supplies and current sources
- Switches up to 6 A, AC or DC
- High-density single VXI slot
- High-isolation low crosstalk

## Product Information

The 1260-16A switches currents up to 6 A, AC or DC, and voltages up to 110 VDC or 250 VAC.

The 1260-16A uses specialized layout techniques to achieve very high isolation and excellent crosstalk performance, making this module ideal for applications that require high signal integrity such as electronic functional testing or data acquisition.

The message-based and register-based Racal Instruments™ Option 01T interface controls the 1260-16A. Refer to the Option 01T data sheet for specifications and

product features such as include, exclude, and scan lists; relay coil-current monitoring; and user-defined path names and reset states.

An IVI-COM driver is also available for this module.

## 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.

### Input Performance

#### Maximum Switching Voltage

- 250 V AC, 110 V DC

#### Maximum Switching Current

- 6 A AC, 6 A DC

#### Maximum Switching Power

- 1500 V A, 180 W

### DC Performance

#### Path Resistance

- <200 mΩ (Initial)
- <230 mΩ (EOL)

#### Insulation Resistance

- >10<sup>9</sup> Ω

### AC Performance (Into 50 Ω)

#### Bandwidth (-3 dB)

- >10 MHz

#### Insertion Loss

- 1 MHz: <0.25 dB
- 10 MHz: <2 dB

#### Isolation

- 1 MHz: >45 dB
- 10 MHz: >30 dB

#### Crosstalk

- 1 MHz: <-60 dB
- 10 MHz: <-40 dB

### Capacitance

- Open Channel: <150 pF
- Channel-Chassis: <450 pF

### Interface

#### Maximum Overall Power Dissipation

- 80 W

#### Current Draw

- +5 VDC at 0.25 A
- +5 VDC at 1.15 A with Option 01T
- +5 VDC at 40 mA per energized relay

#### Front Panel I/O Interface Connector

- 4, 50 pin Positronic connector

### Environmental

#### Temperature

- Operating: 0° C to +55° C
- Non-operating: -40° C to +71° C

#### Humidity (non-condensing)

- 85 % ±5 % at <35° C

#### Altitude

- Operating: 10,000 ft\*
- Non-operating: 15,000 ft

#### Shock

- 10 g, 11 ms, 1/2 sine wave

#### Vibration (non-operating)

- 0.013 in: (pk-pk), 5 to 55 Hz

#### Bench Handling

- 4-inch drop at 45°

#### Emissions

- EN55011A with limits in accordance with EN50081-1

### Immunity

- IEC901-2,3,4 with limits in accordance with EN50082-1

### Safety

- Design to meet EN61010-1 Pollution Class 2
- Impulse Withstand 1000 V

### Switching Time

- <15 ms

### Rated Switch Operations

- Mechanical: 10,000,000 operations
- Electrical: 500,000 @ 250 VAC/1.5 A; 500,000 @30 VDC/1.5 A

### MTBF

- With relays 329,990 hrs (25° C)
- With relays 305,256 hrs (30° C) (50% rated load, 0.1 cycle/hr)

### Mechanical

#### Weight

- Without Option 01T: 3.3 lbs (1.5 kg)
- With Option 01T: 3.6 lbs (1.64 kg)

#### Dimensions

- C-size, single-slot VXIbus module

#### Cooling Requirements (w/o Option 01T)

- Airflow: 5.4 l/s
- Backpressure: 0.5 mm H<sub>2</sub>O

\* Operation at 15,000 feet requires de-rating of maximum overall power dissipation to 65 W

## Ordering Information

Note: An Option 01T smart card must be installed in the left-most slot of a set of 1260-xx series switch cards.

### 408012 : Racal Instruments™ 1260-16A Switch Module (Mature)

64 Channel, 6 A, SPDT

#### Options and Accessories:

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

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

601855-050 : Connector Body

601857 : Connector Pins



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