

Racal Instruments™ 1260-116

High-Density, 5 A SPDT Switch Plug-In

The Racal Instruments™ 1260-116 is a 24-channel, Form C, Single-Pole Double-Throw (SPDT) switch plug-in for use in either a Racal Instruments™ 1260-100 Adapt-a-Switch™ VXI carrier or 1256 GPIB/RS-232 switching mainframe.

Key Features

- High-density, 24 SPDT (Form C) channels
- Each channel switches up to 5 A at 30 VDC or 250 VAC
- Easily configured individual relays
- Ideal for general purpose switching and control of external devices
- Plug-in design for rapid expansion and replacement

Product Information

Custom relay switch networks may be configured with some of the relays while all remaining channels continue independent operations. This plug-in can switch up to 5 A making it useful to control external devices such as motors or loads. It can be used for applications requiring high-current switching of AC and DC power supplies as well as a current source.

If the 1260-116 is used with the Racal Instruments™ 1260-100 Adapt-a-Switch™ platform, a Racal Instruments™ Option 01T is required to communicate with the switch cards, and to provide message-based operation for ease of use and register-based operation for maximum

speeds. If the switch card is used with the 1256 mainframe, no additional controller is required.

The Adapt-a-Switch™ line includes drivers for LabWindows™/CVI and LabVIEW™ for VXI applications. It also includes VXI *plug&play* support for frameworks based on Microsoft Win32® application programming interface.

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

Maximum Switchable Voltage

- 30 VDC or 250 VAC

Maximum Switchable Current

- 5 ADC or AAC

Maximum Switchable Power

- 150 W, 1250 VA

DC Performance

Path Resistance

- <200 mΩ

Isolation

- >10⁹ Ω

AC Performance (Into 50 Ω)

Bandwidth (-3 dB)

- 50 MHz

Insertion Loss

- 300 kHz: <0.7 dB
- 1 MHz: <0.5 dB
- 10 MHz: <0.8 dB

Isolation

- 300 kHz: >50 dB
- 1 MHz: >40 dB
- 10 MHz: >20 dB

Crosstalk

- 300 kHz: <-50 dB
- 1 MHz: <-40 dB
- 10 MHz: <-20 dB

Capacitance

- Channel-Chassis: <5 pF
- Open-Channel: <30 pF

Environmental

Temperature

- Operating: -20° C to 60° C
- Storage: -40° C to 75° C

Relative Humidity

- 85% ±5% non-condensing at <30° C

Altitude

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

Shock

- 30 g, 11 ms, ½ sine wave

Vibration

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

Bench Handling

- 4-inch drop at 45°

Emissions

- EN61326, Class A, Table 3

Immunity

- EN61326, Class A, Table 1

Safety

- CE, EN61010-1

Rated Switch Operations

- Mechanical: 5,000,000 operations
- Electrical: 500,000 operation at full rated load (resistive)

MTBF (MIL-217FN2)

- 979,058 hrs

MTTR

- <5 min

Switching Time

- <10 ms (includes settling time)

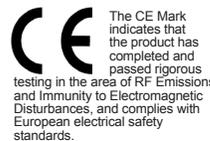
Mechanical

Weight

- 13 oz (0.45 kg)

Dimensions

- 4.5" H x 0.75" W x 9.5" D



Ordering Information

Notes: The 1260-116 uses a 78-pin interface connector, which is supplied with the card.

When the 1260-116 is used in a VXI mainframe other than a 1256, a Racal Instruments™ Option 01T Smart Control Module must be installed in the mainframe's left-most slot.

407748 : Racal Instruments™ 1260-116

24-Channel Form C SPDT Power Switch Plug-In

Accessories:

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

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

602461-078 : Spare 78-Pin Mating Connector

602461-900 : Spare Crimp Contact Pin (78 required)

991041 : Insertion / Removal Tool



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