



52/20 Channel SPDT Plug-in Switch

- ◆ **52 or 20 Channels of SPDT Switching**
- ◆ **Ideal for General Purpose Switching to 60MHz**
- ◆ **Switches Up to 2 A**
- ◆ **Can Be Used in Either VXI or GPIB/RS-232 Switching Systems**
- ◆ **117A Version Accommodates a Low-Cost Ribbon Cable Interface**
- ◆ **Easily Configured to Meet User-Defined Network Requirements**
- ◆ **Standard Adapt-a-Switch® Plug-In Design for Ease of Replacement**

Racal Instruments™ 1260-117/117A is a 52/20-channel, SPDT (Form C) plug-in switch card for the Adapt-a-Switch® platform. It quickly and easily plugs into the front of a VXI Adapt-a-Switch Carrier, Racal Instruments 1260-100 or 1260-101, or Racal Instruments 1256 GPIB/Ethernet Switching System. Please refer to the corresponding literature for specifications and product features.

Each channel of the 1260-117/117A can be used independently or linked to form custom switching networks. The large number of channels allows a significant portion of a switching configuration to be realized in a single slot Racal Instruments Adapt-a-Switch Carrier, saving valuable VXIbus chassis space.

Used with the different or additional switch plug-ins, a single 1260-100 Switch Carrier can accommodate the most diverse and/or dense switching requirements. Since all relays on the 1260-117/117A are electromechanical, all inputs/outputs are interchangeable to meet the test requirements.

Interface connectors are not provided with the 1260-117/117A and must be ordered separately; however, a six-foot unterminated cable assembly is available as a standard option. For the 1260-117/117A, 2 A DIN crimp-style connectors or low-cost 1 A IDC ribbon cable connectors are also available as options.

The Option-01T interface (for VXI) controls the 1260-117/1260-117A using either register-based or message-based commands. The 1256 (for GPIB/Ethernet) supports message-based operations. Refer to the Option-01T/1256 literature for more information about product specifications and features such as include, exclude, scan lists, user-defined path names, and reset states.

The Adapt-a-Switch® series includes VXI *plug&play* support of WIN/98/NT/2000/XP frameworks, including drivers for LabWindows/CVI and LabVIEW.

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1260-117/117A PRODUCT SPECIFICATIONS

INPUT

Maximum Switching Voltage

300 VDC or 300 VAC

Maximum Switching Current

2 ADC/AC, 1 ADC/AC with IDC mating connector

Maximum Switching Power

60 W, 125 VA

DC PERFORMANCE

Path Resistance

< 500 m Ω (Initial)

< 600 m Ω (EOL)

Insulation Resistance

> 10⁹ Ω

Thermal EMF

< 10 μ V

AC PERFORMANCE (into 50 Ω)

Bandwidth (-3 dB)

60 MHz

Insertion Loss

300 kHz: < 0.1 dB

10 MHz: < 0.5 dB

Isolation (50 Ω)

10 MHz: > 40 dB

Crosstalk (50 Ω)

10 MHz: < -30 dB

Capacitance

Channel-Chassis: < 150 pF

Open Channel: < 10 pF

INTERFACE DATA

Cooling

See 1260-100 cooling data

Power Requirements

+5 VDC at 150 mA plus 30 mA per energized relay (750 mA max.)

ORDERING INFORMATION

MODEL/DESCRIPTION

Racal Instruments 1260-117, Adapt-a-Switch Module, 52 Channel SPDT, 2A

Racal Instruments 1260-117 160-pin Connector Kit w/Strain Relief

Racal Instruments 1260-117 160-pin Cable Assembly, 6ft, 24 AWG

Racal Instruments 1260-117A, Adapt-a-Switch Module, 20 Channel SPDT, 2A

Racal Instruments 1260-117A 64 Pin DIN Connector, IDC (1A)*

Racal Instruments 1260-117A 64 Pin DIN Crimp Body (2A)

Racal Instruments 1260-117A 64 Pin DIN crimp Pin (2A)

*Use of this connector may limit maximum current to 1 A

ENVIRONMENTAL DATA

(All Environmental Conditions Tested to MIL-PRF-28800F, Class 3)

Temperature

Operating: 0° C to 55° C

Storage: -40° C to 75° C

Relative Humidity

5% to 95% RH non-condensing \leq 30° C

5% to 75% RH above 30° C

5% to 45% RH above 40° C

Altitude

Operating: 10,000 ft.

Non-Operating: 15,000 ft.

Shock

30 g peak, half sine, 11 ms pulse

Random Vibration

Operating: 5-500 Hz, 0.3 Grms

Non-Operating: 5-500 Hz, 2.1 Grms

Bench Handling

4-inch drop at 45°

EMC

Emissions/Immunity

EN61326: 1997 + A1: 1998, Class A

Safety

EN61010-1: 1993 + A2: 1995

RELIABILITY

Switching Time

< 3 ms (includes settling time)

Rated Switch Operations

Mechanical: 1 X 10⁸

Electrical: 1 x 10⁶ @ 50 V, 0.1 A

x 10⁶ @ 10 V, 10 mA

MTBF

\geq 822,885 hrs. (MIL-STD-217E)

MTTR

< 5 minutes

MECHANICAL

Weight

11.2 oz. (0.32 kg)

Dimensions

4.5" H x 0.75" W x 9.5" D

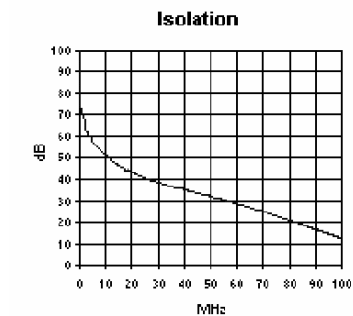
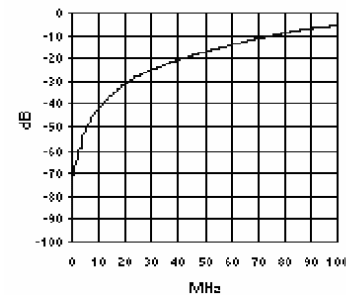
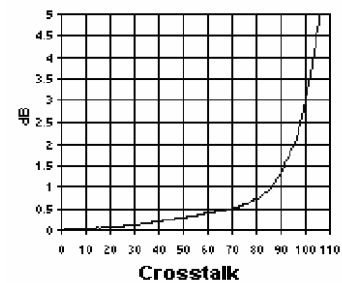
Front Panel I/O Interface Connector

1260-117: 160 pin DIN connector

1260-117A: 64 pin DIN Connector

TYPICAL CHANNEL

Insertion Loss



Note: Each 1260-117/117A requires one mating connector.

PART NUMBER

407658

407664


407408-001

407658-001

602004

602159-064

602159-900

 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.

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.



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