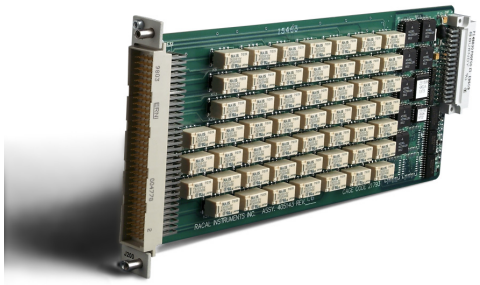


Racal Instruments™ 1260-117/117A

52/20 Channel SPDT Switch Plug-in

The 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 Racal Instruments™ 1260-100 and 1260-101 VXI Adapt-a-Switch™ carriers or the Racal Instruments™ 1256 GPIB/Ethernet and 1256L (LXI Core 2011 Compliant) switching mainframes.

Key Features

- **52 or 20 channels of SPDT switching**
- **Ideal for general purpose switching up to 60 MHz**
- **Switches up to 2 A**
- **Can be used in VXI, GPIB/RS-232, and LXI switching systems**
- **1260-117A version accommodates a low-cost ribbon cable interface**
- **Standard Adapt-a-Switch™ plug-in design for ease of replacement**

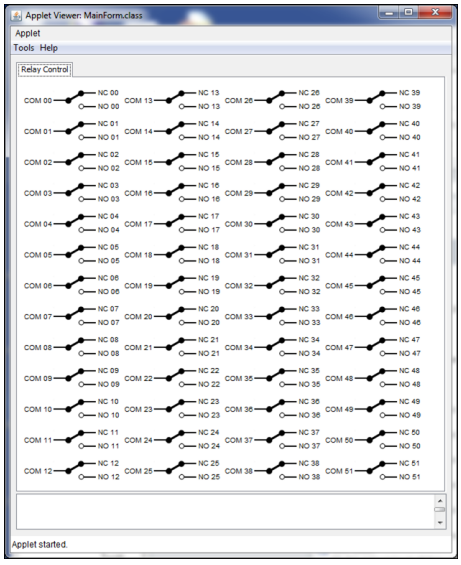
Product Information

The large number of channels provided by the 1260-117/117A allows a significant portion of a switching configuration to be realized in a single slot of a switching subsystem, saving valuable VXIbus chassis space.

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 Racal Instruments™ Option 01T interface (for VXI) controls the 1260-117/117A using either register-based or message-based commands. The 1256 (for GPIB/Ethernet) and 1256L (for LXI) support message-based operations. Refer to the Option 01T/1256/1256L 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 for frameworks based on Microsoft Win32® application programming interface, including drivers for LabWindows™/CVI and LabVIEW™.



1260-117/117A LXI Web Control

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.

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 mΩ (Initial)

Insulation Resistance
- $>10^9$ Ω

Thermal EMF
- <10 µV

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

Power Requirements
- +5 VDC at 150 mA plus 30 mA per energized relay (750 mA max)

Front Panel I/O Interface Connector
- 1260-117: 160 pin DIN connector
- 1260-117A: 64 pin DIN Connector

Environmental

(All environmental conditions designed to meet 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 ≤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 to 500 Hz, 0.3 G_{rms}
- Non-Operating: 5 to 500 Hz, 2.1 G_{rms}

Bench Handling
- 4-inch drop at 45°

Emissions/Immunity
- EN61326: 1997 + A1: 1998, Class A

Safety
- EN61010-1: 1993 + A2: 1995

Switching Time
- <3 ms (includes settling time)

Rated Switch Operations
- Mechanical: 1 X 10^8
- Electrical: 1 x 10^6 @ 50 V, 0.1 A; 1 x 10^6 @ 10 V, 10 mA

MTBF (MIL-STD-217E)
- ≥822,885 hrs

MTTR
- <5 min

Software

Drivers
- LabVIEW™, LabWindows™/CVI, VXI*plug&play* support for frameworks based on Microsoft Win32® application programming interface

Web Controls
- When used with a Racal Instruments™ 1256L

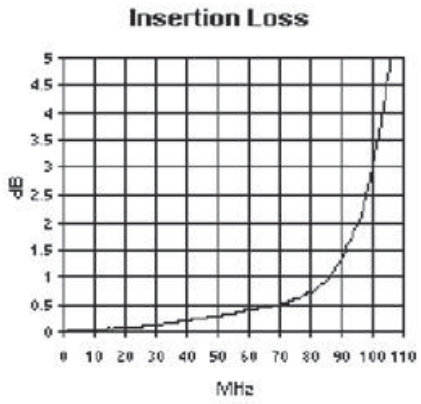
Mechanical

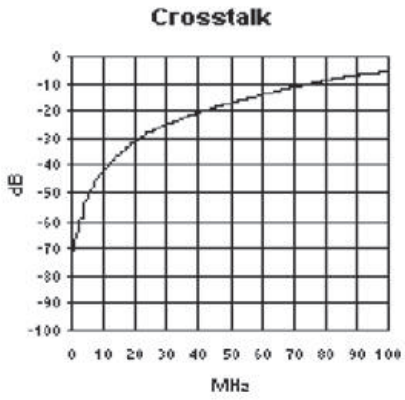
Weight
- 11.2 oz (0.32 kg)

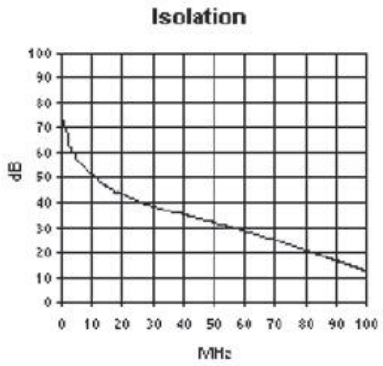
Dimensions
- 4.5" H x 0.75" W x 9.5" D

Cooling
- See 1260-100 cooling data

Typical Channel







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

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

Note: When the 1260-117/117A is used in a VXI mainframe other than a 1256 or 1256L, a Racal Instruments™ Option 01T Smart Control Module must be installed in the mainframe's left-most slot.

407658 : Racal Instruments™ 1260-117
Adapt-a-Switch™ Module, 52 Channel SPDT, 2 A

407658-001 : Racal Instruments™ 1260-117A
Adapt-a-Switch™ Module, 20 Channel SPDT, 2 A

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
407408-001 : 160-Pin Cable Assembly, 6 ft, 24 AWG
407409-001 : 160-Pin Cable Assembly, 12 ft, 24 AWG
407664 : 160-Pin Connector Kit with Strain Relief
407809-001 : 160-Pin Cable Assembly; 6 ft, 24 AWG
602258-116 : 160-Pin Backshell
602258-900 : Extra 24 Gauge contact
990898 : Insertion Tool
990899 : Extraction Tool
991020 : Crimp Tool