



Racal Instruments™

1260-120

Power Switch Plug-In

The Racal Instruments™ 1260-120 is a 20-channel, SPST (Form A) high-power, switch plug-in. It installs easily into the Racal Instruments™ 1260-100 and 1260-101 Adapt-a-Switch™ VXIbus carriers or the Racal Instruments™ 1256 GPIB and 1256L (LXI Core 2011 Compliant) switching mainframes.

Key Features

- 20 Channels of SPST high-power switching
- Ideal for switching AC or DC power
- Switches up to 13 A
- Can be used in VXI, GPIB/RS-232, and LXI switching systems
- Interface for external “emergency reset” switch to open all channels
- Standard Adapt-a-Switch™ plug-in design for ease of replacement

Product Information

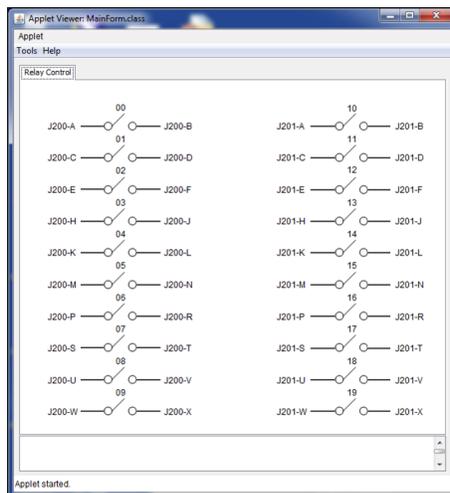
Each channel of the 1260-120 can switch up to 13 A, 250 VAC or 10 A, 125 VDC; its switching capability makes it the ideal solution for applications requiring high-current switching of AC power, DC power supplies, and AC or DC current sources.

To ensure safe switching in high-current applications, an external “Emergency Reset” switch may be connected to the front-panel connector of the 1260-120 to provide the ability to instantly open all channels on the switch card, or to open all channels on all cards connected to the same Racal Instruments™ Option 01T.

As all relays on the 1260-120 are electromechanical, all inputs/outputs are interchangeable to meet the test requirements.

Mating front-panel connectors, complete with pins, are included with the 1260-120. The Option 01T interface controls the 1260-120, using both register-based and message-based operation. Refer to the Option 01T data sheet for product specifications and features such as include, exclude, and scan lists; relay coil-current monitoring; and user-defined path names and reset states.

The Adapt-a-Switch™ series includes VXIplug&play support for frameworks based on Microsoft Win32® application programming interface, including drivers for LabWindows™/CVI and LabVIEW™.



1260-120 LXI Web Control

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

- 125 VDC or 250 VAC

Maximum Switching Current

- 10 ADC or 13 AAC

Maximum Switching Power

- 300 W, 200 VA

DC Performance

Path Resistance

- <200 m Ω (Initial)

Insulation Resistance

- 10⁹ Ω

Thermal EMF

- <50 μ V

AC Performance (Into 50 Ω)

Bandwidth (-3 dB)

- Sm Sig: 50 MHz
- Power: 400 Hz

Insertion Loss (-3 dB)

- 1 kHz: -3 dB

Isolation (50 Ω)

- 1 kHz: >100 dB

Crosstalk (50 Ω)

- 1 kHz: <100 dB

Capacitance

- Channel-Chassis: <10 pF
- Open Channel: <200 pF

Interface

Power Requirements

- +5 VDC at 150 mA plus 40 mA per energized relay (1A max)

Front Panel I/O Interface Connector

- 20 pin rack & panel

Environmental

(All environmental conditions designed to meet MIL-PRF-28800F, Class 3)

Temperature

- Operating: 0° C to 55° C
- Storage: -4° C to 75° C

Relative Humidity

- 85% \pm 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

- EN55011A with limits in accordance with EN50081-1

Immunity

- IEC801-2, 3, 4 with limits in accordance with EN50082-1

Safety

- EN61010-1

Rated Switch Operations

- Mechanical: 10,000,000 operations
- Electrical: 100,000 at full rated load

Switching Time

- <10 ms (includes settling time)

MTBF (MIL-HDBK-217E)

- 979,058 hrs

MTTR

- <5 min

Software

Drivers

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

Web Controls

- When used with a Racal Instruments™ 1256L

Mechanical

Weight

- 13 oz (0.45 kg)

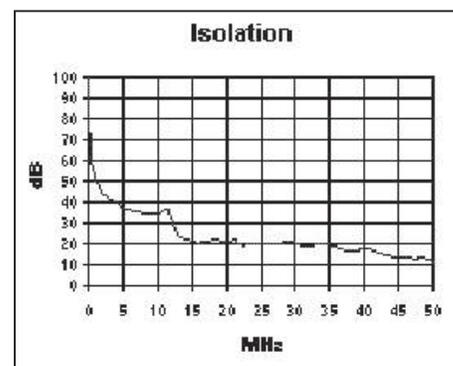
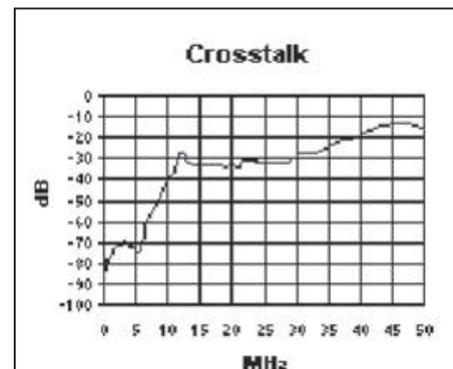
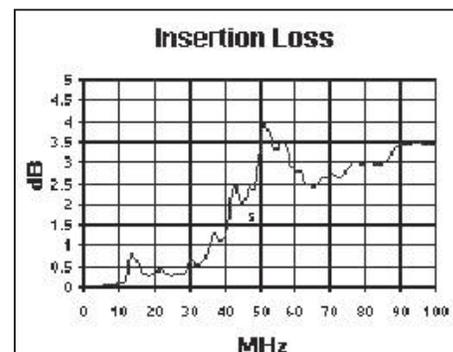
Dimensions

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

Cooling

- See 1260-100 cooling data

Typical Channel



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

Note: When the 1260-120 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.

407631 : Racal Instruments™ 1260-120

Adapt-a-Switch™ Module, 20-Channel SPST 10 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

407657 : 20-Pin Cable Assembly, 6 ft., 14 AWG

407660 : 20-Pin Connector Kit with Strain Relief

602349-900 : Extra solder contact

All trademarks and service marks used in this document are the property of their respective owners.

- Racal Instruments and Adapt-a-Switch are trademarks of Astronics Test Systems Inc. in the United States and/or other countries
- Microsoft and Win32 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries
- LabVIEW and LabWindows are trademarks of National Instruments in the United States and/or other countries

