



Power Switch Plug-In Module

- ◆ **20 Channels of SPST High-Power Switching**
- ◆ **Ideal for Switching AC or DC Power**
- ◆ **Switches Up to 13 A**
- ◆ **Interface for External “Emergency Reset” Switch to Open All Channels**
- ◆ **Standard Adapt-a-Switch® Plug-in Design for Ease of Replacement**

Racal Instruments 1260-120 is a 20-channel, SPST (Form A) high-power, plug-in switch card for the Adapt-a-Switch® carrier. It installs easily into the Adapt-a-Switch VXIbus Carrier, Racal Instruments 1260-100, or Racal Instruments 1256 GPIB Switching Mainframe. Please refer to the 1260-100 or 1256 data sheet for specifications and product features.

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 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 WIN95/98/ME/NT/2000/XP operating systems, including drivers for LabWindows/CVI and LabVIEW.

1260-120 PRODUCT SPECIFICATIONS

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 mΩ

Insulation Resistance
10⁹ Ω

Thermal EMF
< 50 μV

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)
1kHz: > 100 dB

Crosstalk (50 Ω)
1kHz: < 100 dB

Capacitance

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

Adapt-a-Switch® Plug-in

INTERFACE DATA

Cooling

See 1260-100 cooling data

Power Requirements

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

ENVIRONMENTAL DATA

Temperature

Operating: 0° C to 55° C
Storage: -4° 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 inch: P-P, 5-55 Hz

Bench Handling

4-inch drop at 45°

EMC

Emissions

EN55011A with limits in accordance with EN50081-1

Immunity

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

Safety

EN61010-1

RELIABILITY

Rated Switch Operations

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

Switching Time

< 10 ms (includes settling time)

MTBF

979,058 hours (MIL-HDBK-217E)

MTRR

< 5 minutes

MECHANICAL

Weight

13 oz (0.45kg)

Dimensions

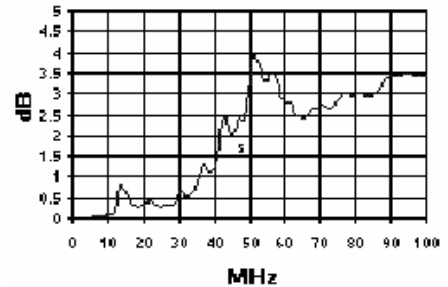
4.5" H x 0.75" W x 9.5" D

Front Panel I/O Interface Connector

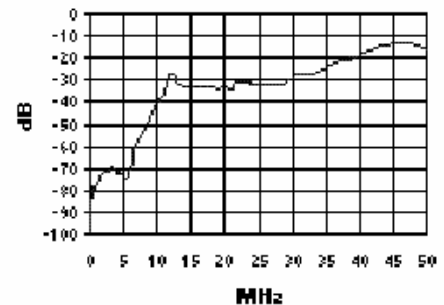
20 pin rack & panel

TYPICAL CHANNEL

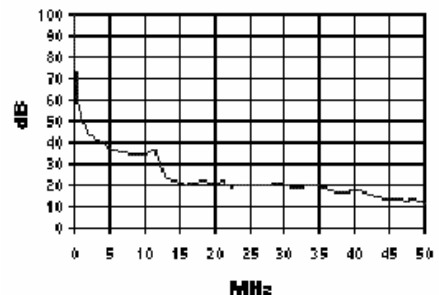
Insertion Loss



Crosstalk



Isolation



CE 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.

ORDERING INFORMATION

MODEL/DESCRIPTION

Racal Instruments 1260-120, Adapt-a-Switch Module, 20 Channel SPST, 10A
Racal Instruments 20 pin Mating Connector w/ pins
Racal Instruments 125820-pin Cable Assembly, 6ft., 14AWG

PART NUMBER

407631
407660
407657

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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