

## Power Switch Plug-in

- ◆ **12 Channels of SPDT Switches**
- ◆ **AC and DC Power Switching**
- ◆ **Terminal Block or Connector Interface**
- ◆ **10 AAC Switching Capability**
- ◆ **"Emergency Reset" Panel Interface**
- ◆ **Power-Switching Networks Configured From 12 Channels**

Racal Instruments 1260-121A/B is a 12-channel SPDT switching card for use in either the 1260-100 VXIbus Carrier or the 1256 GPIB/RS-232 Switching Mainframe..

Each channel of the 1260-121A/B switches up to 10 AAC, making it the ideal solution for applications requiring high-current switching of AC and DC power supplies, as well as current sources.

The 1260-121 A/B is available in two versions. Version "A" has a screw terminal block interface, and version "B" has 2 interface connectors. A set of mating connectors is supplied with the card.

The front panel of the "B" version houses an external "Emergency Reset" which opens all relays when triggered to ensure safe switching in high-current applications.

Our advanced "Exclude" feature ensures maximum safety when switching power. This Exclude command prevents simultaneous switch closures that could cause a short or other hazardous connection.

Separate connections to both sides of the relay contacts permit each channel to function independently or to be configured as part of a custom network.

When used with Racal Instruments 1260-100 Adapt-a-Switch™ platform, an Option 01T is required to communicate with any set of switch cards. The Option 01T provides message-based operation for ease-of-use and register-based operation for maximum speeds. When used with Racal Instruments 1256 mainframe, no additional controller is required.

As part of our Adapt-a-Switch line, Racal Instruments 1260-121 includes drivers for LabWindows/CVI and LabVIEW for VXI applications. It also includes VXIplug&play compliant support for Windows 95/98/NT/2000 platforms.

# 1260-121A/B PRODUCT SPECIFICATIONS

## INPUT

### Maximum Switchable Voltage

125 VDC or 277 VAC

### Switching Capacity

5A, 30 VDC Resistive  
0.3A, 110 VDC Resistive  
5A, 277 VAC General Use  
10A, 125 VAC General Use

### Maximum Switchable Power

1250 VA  
150 W

## DC PERFORMANCE

### Path Resistance

< 500 mΩ

### Insulation Resistance

> 10<sup>9</sup> Ω

### Thermal EMF

< 20 μV

## AC PERFORMANCE (Into 50 Ω)

### Bandwidth (-3 dB)

Low Current: 35 MHz  
Power: 400 Hz

### Insertion Loss

1 kHz: -1 dB

### Isolation

1 kHz: > 100 dB

### Crosstalk

1 kHz: < -100 dB

## Capacitance

Channel-Chassis: < 1 pF  
Open-Channel: < 12 pF

## ENVIRONMENTAL DATA

### Temperature

Operating: 0° C to 50° C  
Storage: -40° C to 75° C

### Relative Humidity

85% 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), 5-55 Hz

### Bench Handling

4-inch drop at 45°

## EMC

### Emissions

EN61326, Table 3

### Immunity

EN61326, Table 1

### Safety

EN61010-1

## Reliability

### 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

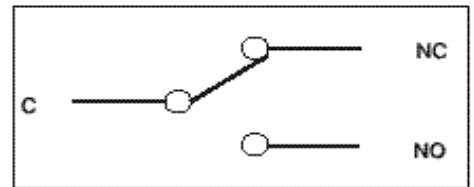
13 oz. (0.45 kg)

### Dimensions

4.5" H x 0.72" W x 9.5" D

### Emergency Reset Panel Interface

3.5 mm D phone jack



Model 1260-121 A/B  
12 independent relays; 1 channel shown

**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

<u>MODEL/DESCRIPTION</u>	<u>PART NUMBER</u>
Racal Instruments 1260-121A, 12-Channel, SPDT Power Switch	407740-001
Racal Instruments 1260-121B, 12-Channel, SPDT Power Switch	407740-002
Racal Instruments Spare 20-Pin Mating Connector Kit	407660
Racal Instruments 18-Conductor Cable Assembly, 6 ft., 14 AWG (2 Req'd)	407657-018

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.



**EADS North America Defense Test and Services**  
1.800.722.2528/1.949.859.8999      sales@eads-nadefense.com