

## High-Voltage Multiplexer Plug-In

Racal Instruments 1260-136 series plug-ins are high-voltage relay multiplexers for the Adapt-a-Switch™ platform. These quickly and easily plug into the front of an Adapt-a-Switch Carrier, Model 1260-100. Please refer to the model 1260-100 data sheet for Adapt-a-Switch platform features and specifications..

- ◆ **Ideal for Hipot and Cable Breakdown Testing**
- ◆ **Ideal for Switching Source-measure Units and High-voltage Power Supplies in an ATE**
- ◆ **High Density - up to 1X42 on a Single Plug-in**
- ◆ **Software Configurable Switch Modes Simplify Test Development**
- ◆ **Three Relay Versions Available to Support a Wide Range of Requirements**
- ◆ **Plug-in Design for Rapid Expansion and Replacement**

Each 1260-136 series plug-in can be configured via standard program control into any of the following configurations:

- single 1X21 two-wire multiplexer
- single 1X42 one-wire multiplexer
- two 1X21 one-wire multiplexer

1260-136 plug-ins can be used for distribution applications in which any combination of relays per multiplexer are closed at a time, or in classical scanner applications in which only one relay per multiplexer may be closed. When used as a scanner, the 1260 series “exclude” feature will automatically open the last connection when a new connection is programmed. This reduces the number of commands sent to the switch, thereby reducing test time. Make-before-break or break-before-make can also be programmed.

Three different versions of this plug-in are available to support a range of high voltage switching requirements. Each version uses a different high voltage relay. Basic “hot-switching” specifications of these plug-ins are as follows:

- 1260-136B, 500V, Reed Relay
- 1260-136C, 1kV, Reed Relay
- 1260-136D, 500V, Mercury Wetted Reed Relay

The 1260-136D must be oriented vertically to operate properly. This is the normal position for installations using a 13-slot VXI chassis and Adapt-a-Switch carrier. The 1260-136B and C versions are not position sensitive; they will operate properly in installations oriented in any direction.

An Option 01T is required to communicate with 1260 series modules, and provides message-based operation for ease of use and register-based operation for maximum speed. The Option 01T provides a single point of software control for the switching system with advanced features such as include, exclude, scan, relay monitoring, user defined path names, and reset states.

The 1260 series line includes VXI *plug&play* support of Win95/NT frameworks including drivers for LabWindows/CVI and LabView. Please refer to the Option 01T data sheet for additional product features and specifications

# 1260-136 PRODUCT SPECIFICATIONS

## INPUT

### Maximum Switching Voltage

B,D: 500VDC, 500VACpk-pk  
C: 1000VDC, 1000VACpk-pk

### Maximum Switching Current

B: 0.5ADC or AAC  
C,D: 1ADC or AAC

### Maximum Switching Power

B: 10W, 10VA  
C: 25W, 25VA  
D: 50W, 50VA

## DC PERFORMANCE

### Path Resistance

<850m

### Insulation Resistance

107

## INTERFACE DATA

### Cooling Requirements

See 1260-100 cooling data.

### Power Requirements

+5VDC at 150mA plus 25mA per energized relay (1.4A max.)

## ENVIRONMENTAL DATA

### Temperature

Operating: 0°C to 55°C  
Storage: 40°C to 75°C

### Relative Humidity

85% ±5%, non-condensing at <30°C

### Altitude

Operating: 10,000 ft.  
Non-Operating: 15,000 ft.

### Shock

30g, 11ms, ½ sine wave

### Vibration

0.013inch P-P, 5-55Hz

### 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

### Relay Operate Time

0.5mSec (Typical)

### Contact Bounce Time

B,C: 0.25mSec (Typical)  
D: None

### Rated Switch Operations

B,C: Mechanical: 100,000,000 operations  
Electrical: 1,000,000 operations at full rated load  
D: Mechanical: 1,000,000,000 operations  
Electrical: 50,000,000 operations at full rated load

### MTBF

MIL-HDBK-217FN2 is 87,796 hrs  
Telcordia (Bellcore) 6 is 229,159 hrs

### MTTR

<5 minutes

## MECHANICAL

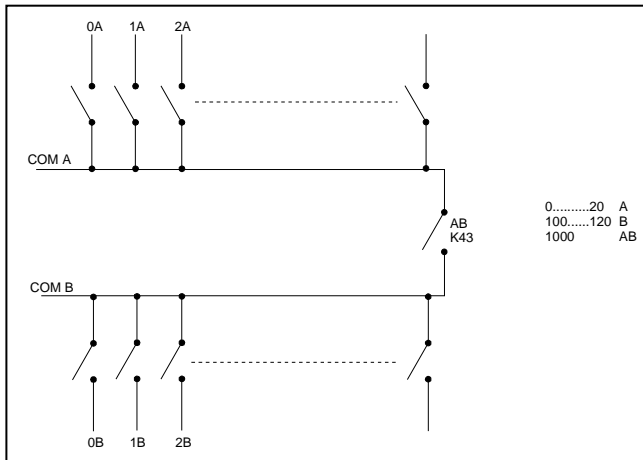
### Weight

9 oz. (0.26 kg)

### Dimensions

4.5" H x 0.75" W x 9.5" D

1260-136  
Relay  
Diagram



## ORDERING INFORMATION

### MODEL/DESCRIPTION


Racal Instruments 1260-136B, 500V, 0.5A, Reed Relay Multiplexer  
Racal Instruments 1260-136C, 1kV, 1.0A, Reed Relay Multiplexer  
Racal Instruments 1260-136D, 500V, 1.0A, Reed Relay Multiplexer  
48-pin High Voltage Mating Connector Kit

### PART NUMBER

407698-002  
407698-003  
407698-004  
407664-001

\*One Option 01T must be ordered with switch system. Please specify the card on which Option 01T will be installed

Note: Each switch card requires one mating connector

 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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