

# Racal Instruments™ **1260-134**High-Density Multiplexer Plug-In

The Racal Instruments<sup>™</sup> 1260-134 is a sixteen-channel, 1x4, 2-wire scanner/ multiplexer switch card for use in either the Racal Instruments<sup>™</sup> 1260-100 or 1260-101 Adapt-a-Switch<sup>™</sup> VXI carriers or the Racal Instruments<sup>™</sup> 1256 GPIB/ Ethernet switching mainframe.

#### **Key Features**

- Sixteen 1x4, two-wire scanner/ multiplexers
- 100 MHz bandwidth
- Switches up to 2 A
- Standard Adapt-a-Switch™ plug-in designed for ease of replacement
- Ideal for audio, video, telecom, or general-purpose switching

# **Product Information**

The 1260-134 is ideal for use in audio, video, telecom, or general-purpose signal switching applications.

Each 1x4 multiplexer is independently controlled, enabling the user to connect any combination of channels to the common port. This configuration provides up to four identical outputs per MUX with up to 2 A current capability. A 4-wire 1x4 can also be achieved by using two 1x4 cells.

The 1260-134 installs easily and directly from the front panel into the 1260-100 or the 1256.

As all relays on the 1260-134 are electromechanical, all inputs/outputs are interchangeable to meet the system's test requirements. Interface connectors are not provided with the 1260-134 and must be ordered separately; however, a 6-foot unterminated cable assembly is available as a standard option. The Racal Instruments<sup>™</sup> Option-01T interface (for VXI) controls the 1260-134 using either register-based or messagebased commands. The 1256 (for GPIB/ Ethernet) supports message-based operations. Refer to the Option-01T/1256 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<sup>®</sup> application programming interface, including drivers for LabWindows™/CVI and LabVIEW<sup>™</sup>.



# 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 or 2 AAC
- Maximum Switching Power
- 60 W, 125 VA

# **DC** Performance

- Path Resistance
- <500 mΩ

#### Thermal EMF

- <10 µV
- Insulation Resistance
- 10<sup>9</sup> Ω

# AC Performance

- Bandwidth (-3 dB)
- 100 MHz

#### Insertion Loss

- 10 MHz: 0.5 dB
- 50 MHz: 1 dB

#### Isolation (50 Ω)

- 100 kHz: >50 dB
- 1 MHz: >40 dB

# Crosstalk (50 Ω)

- 100 kHz: <-50 dB
- 1 MHz: <-40 dB

#### Capacitance

- Channel-Chassis: <100 pF
- Open Channel: <5 pF

### Interface

#### **Power Requirements**

 +5 VDC at 150 mA plus 30 mA per energized relay (2 A max)

#### Front Panel I/O Interface Connector

160 pin DIN Connector

# Environmental

#### 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 ftNon-Operating: 15,000 ft

#### Shock

• 30 g, 11 ms, 1/2 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

# Racal Instruments™ **1260-134**

#### Immunity

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

#### Safety

• EN61010-1

#### **Switching Time**

• <3 ms (includes settling time)</p>

#### **Rated Switch Operations**

- Mechanical: 1 x 10<sup>8</sup>
- Electrical: 1 x 10<sup>6</sup> @ 50 V, 0.1 A; 1 x 10<sup>6</sup> @ 10 V, 10 mA

#### MTBF (MIL-STD-217E)

- 749,095 hrs
- MTTR
- <5 min

#### 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



# Ordering Information

Note: When the 1260-134 is used in a VXI mainframe other than a 1256, a Racal Instruments™ Option 01T Smart Control Module must be installed in the mainframe's left-most slot.

#### 407662 : Racal Instruments™ 1260-134

Adapt-a-Switch™ Module, 16-1x4 Two-wire Muxes, 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
- 407664 : 160-Pin Connector Kit with Strain Relief

407408-001 : 160-Pin Cable Assembly, 6 ft, 24 AWG 407409-001 : 160-Pin Cable Assembly, 12 ft, 24 AWG 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

#### 990899 : Extraction Too

991020 : Crimp Tool



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