

## Key Features

## - Sixteen 1x4, two-wire scanner/ multiplexers

- 100 MHz bandwidth
- Switches up to 2 A
- Standard Adapt-a-Switch ${ }^{\text {™ }}$ plug-in designed for ease of replacement
- Ideal for audio, video, telecom, or general-purpose switching


## Racal Instruments ${ }^{\text {TM }}$ <br> 1260-134 <br> High-Density Multiplexer Plug-In

The Racal Instruments ${ }^{\text {M }}$ 1260-134 is a sixteen-channel, 1x4, 2-wire scanner/ multiplexer switch card for use in either the Racal Instruments ${ }^{\text {TM }}$ 1260-100 or 1260-101 Adapt-a-Switch™ VXI carriers or the Racal Instruments™ 1256 GPIB/ Ethernet switching mainframe.

## Product Information

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

Each $1 \times 4$ 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 $1 \times 4$ can also be achieved by using two $1 \times 4$ 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 ${ }^{\text {TM }}$ 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 ${ }^{\text {TM }}$ series includes VXIplug\&play support for frameworks based on Microsoft Win32 ${ }^{\circledR}$ application programming interface, including drivers for LabWindows ${ }^{\text {™ }} / \mathrm{CVI}$ and LabVIEW ${ }^{\text {™ }}$.

## 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

- < $500 \mathrm{~m} \Omega$


## Thermal EMF

- <10 $\mu \mathrm{V}$

Insulation Resistance

- $10^{9} \Omega$


## AC Performance

Bandwidth (-3 dB)

- 100 MHz

Insertion Loss

- $10 \mathrm{MHz}: 0.5 \mathrm{~dB}$
- $50 \mathrm{MHz}: 1 \mathrm{~dB}$

Isolation (50 $\mathbf{\Omega}$ )

- $100 \mathrm{kHz}:>50 \mathrm{~dB}$
- $1 \mathrm{MHz}:>40 \mathrm{~dB}$

Crosstalk ( $50 \Omega$ )

- 100 kHz : <-50 dB
- $1 \mathrm{MHz}:<-40 \mathrm{~dB}$


## Capacitance

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


## Interface

Power Requirements

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

Front Panel I/O Interface Connector

- 160 pin DIN Connector


## Environmental

Temperature

- Operating: $0^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
- Storage: $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$

Relative Humidity

- $85 \% \pm 5 \%$ non-condensing at $<30^{\circ} \mathrm{C}$

Altitude

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

Shock

- $30 \mathrm{~g}, 11 \mathrm{~ms}, 1 / 2$ sine wave


## Vibration

- 0.013 in: (pk-pk), 5 to 55 Hz

Bench Handling

- 4-inch drop at $45^{\circ}$


## Emissions

- EN55011A with limits in accordance with EN50081-1


## Immunity

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


## Safety

- EN61010-1


## Switching Time

- <3 ms (includes settling time)


## Rated Switch Operations

- Mechanical: $1 \times 10^{8}$
- Electrical: $1 \times 10^{6} @ 50 \mathrm{~V}, 0.1 \mathrm{~A}$; $1 \times 10^{6} @ 10 \mathrm{~V}, 10 \mathrm{~mA}$

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 ${ }^{\text {M }}$ Option 01T Smart Control Module must be installed in the mainframe's left-most slot.

407662 : Racal Instruments ${ }^{\text {™ }}$ 1260-134
Adapt-a-Switch ${ }^{\text {TM }}$ Module, 16-1x4 Two-wire Muxes, 2 A

## Accessories:

OPT-405108-001 : Racal InstrumentsTM Option 01T Smart Card Module installed (manual must be ordered separately; see below)
407531-001 : Racal Instruments ${ }^{T M}$ 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
991020 : Crimp Tool


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