

High-Density Multiplexer Module

- ◆ **Program Configurable as 1, 2 or 4-wire Muxes**
- ◆ **Muxes are Configurable as 1x8, 1x16, 1x32, 1x64, 1x128 and 1x256**
- ◆ **30MHz Bandwidth (1x8 Configuration)**
- ◆ **Switches Signals Up to 2 Amps or 250 VAC**
- ◆ **Onboard Series Components Available**

Racal Instruments 1260-38 is a high-density scanner and multiplexer, ideal for applications with large switch requirements such as continuity testing and audio or telephone line switching.

The 1260-38 can be user-configured in many ways, from one 1x128 to sixteen 1x8 2-wire multiplexers, switching up to 250VDC or 2A per channel. Configuration is programmable using interconnecting relays. An additional relay that selects between the high and low sides of the two-wire mode allows the 1260-38 to act as a 1-wire scanner over 256 points. Four-wire switching is also possible by connecting two-wire sections in parallel using internal relays.

Relay coil current monitoring is available to provide confidence checking which gives the user assurance of proper relay operation. Built-in 10Ω resistors may be placed in series with common connections to attenuate current and voltage spikes.

The 1260-38 is controlled by the Option 01 message-based interface.

1260-38 PRODUCT SPECIFICATIONS

DC PERFORMANCE

Maximum Switching Voltage

220VDC or 250VAC

Maximum Switching Current

2ADC or 2AAC

Maximum Switching Power

60W, 125VA

Path Resistance

1x64 (2-wire): < 0.5Ω

1x128 (2-wire): <0.75Ω

Thermal EMF

1x8 (2-wire): <15μV

1x128 (2-wire): <20μV

AC PERFORMANCE (into 50Ω)

Bandwidth (-3 dB)

1x8, 1x16 (2-wire): 30MHz (35MHz typ.)

1x128 (2-wire): 2MHz (2.3MHz typ.)

Insertion Loss

Configuration	100kHz	1MHz	10MHz
1x8 (2-wire)	<0.1dB	<0.25dB	<1.7dB
1x16 (2-wire)	<0.1dB	<0.25dB	<2.0dB
1x128 (2-wire)	<0.2dB	<1.0dB	—

Crosstalk

100kHz: <-55dB

1MHz: <-50dB

Isolation (1x8)

100kHz: >40dB

1MHz: >35dB

Capacitance

1x8 (closed Chan.-Chassis): <5pF

1x8 (closed Chan. Hi-Lo): <120pF (50pF typ.)

1x8 (Open Chan. Hi-Lo): <50pF (20pF typ.)

1x128 (Closed Chan. Hi-Lo): <600pF (480pF typ.)

VXIBUS INTERFACE DATA

Cooling Requirements

Airflow: 1.0 liters/sec

Backpressure: 0.05mm H₂O

With Option 01S/T

Airflow: 2.0 liters/sec

Backpressure: 0.2mm H₂O

Peak and Dynamic Current

+24V +5V +5V w/Option 01

I_{Pm} 6mA* 400mA 2.8A

I_{Dm} 0mA 75mA 225mA

* per energized relay

Dimensions

C-size, Single-slot VXIbus Module

ENVIRONMENTAL DATA

Temperature

Operating: 0° C to 55° C

Storage: -40° C to 75° C

Humidity

<30° C: 95%, ±5%, non-condensing

30° C - 40° C: 75%, ±5%

>40° C: 45%, ±5%

Altitude

Operating: 10,000 ft.

Non-Operating: 15,000 ft.

Vibration

0.013inch: double amplitude 5-55Hz

Weight

Slave: 3.2 lb (1.45 kg)

With Option 01: 3.5 lb (1.60 kg)

Rated Switch Operations

No load: 100,000,000

2A@50VDC: 100,000

Typical Programming Syntax

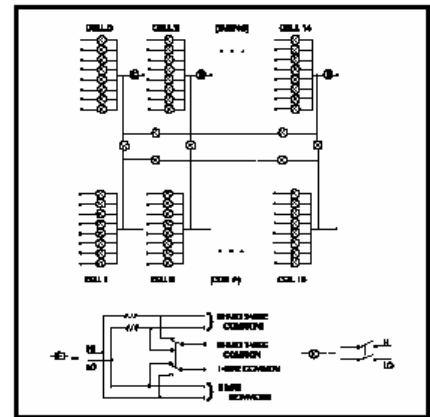
Programming syntax is in the form:

"<module address>.

<channel number>" Example: CLOSE 3.04

This CLOSE statement will close channel number 4 on the 1260-38 at card address 3.

Note: Available mating connectors and accessories are listed below



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 1260-38, High Density Multiplexer

Option 01*, Smart Card Module (installed)

160 Pin Mating Connector Kit w/Backshell and Pins(1260-38 uses two)

Insertion Tool

Extraction Tool

160 Pin Cable Assembly, 24 Ga, 6 Feet (1260-38 uses two)

160 Pin Cable Assembly, 24 Ga, 12 Feet (1260-38 uses two)

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

PART NUMBER

407410

OPT-401901-005

407407

990898

990899

407408

407409

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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