

Matrix Switch Module

- ◆ **Configurable as Any of the Following Matrices:**
 - One 4x24 Multiplexer
 - Two 4x12 Multiplexers
 - One 8x12 Multiplexer
- ◆ **20MHz Bandwidth**
- ◆ **True Matrix**
- ◆ **Switches Signal up to 1A and 250 V**
- ◆ **Non-latching Relays (Open When Power is Lost)**

Racal Instruments 1260-40 module provides matrix switching in three configurations. The excellent bandwidth, isolation and crosstalk performance make it ideally suited to the most demanding applications requiring a true matrix.

The 1260-40 may be extended externally through use of expansion connectors located on the front panel. This allows larger matrices to be easily configured.

The 1260-40 utilizes relays at the row inputs of each one of the 4x16 matrix blocks. The guard relays are non-latching and revert to the open state when power is lost, therefore, disconnecting the signal paths to the UUT upon removal of power from the test station. This is an important consideration in ATE because when power is returned to the test station, the UUT is guaranteed not to receive any unwanted signals.

Relay coil current monitoring is available to provide confidence checking which gives the user assurance of proper relay operation.

The 1260-40 is controlled by the Option 01 message-based interface.

1260-40 PRODUCT SPECIFICATIONS

Maximum Switchable Voltage

(Terminal-Terminal or Terminal-Chassis)
250 VDC or VACrms

Maximum Switchable Current

(DC or AC rms)
Per Channel: 1A

Maximum Switchable Power

Per Channel: 30WDC, 62.5VAC

DC PERFORMANCE

Path Resistance

<1 \square

Isolation

>10¹⁰ Ω

AC PERFORMANCE (into 50 Ω)

Capacitance

Open Channel: <10pF
Channel-Chassis: <70pF
High-Low: <40pF (typical)

Bandwidth (-3dB)

20MHz (typical)

Insertion Loss (50 Ω Termination)

100kHz: <0.3dB
1MHz: <1.0dB
20MHz: <3.0dB

Crosstalk (50 Ω Termination)

100kHz: <-70dB
1MHz: <-50dB
10MHz: <-20dB

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

Power Requirements (I_{pm})

+5V: 0.4A (2.8A with Option 01 installed)
+24V: 10 mA per relay (energized)

Weight

2.59 lb (1.17 kg) without Option 01
2.87 lb (1.29 kg) with Option 01

Dimensions

C-size, Single-slot VXIbus Module

Switch Configuration

-40A - one 4x24 2-wire matrix
-40B - one 8x12 2-wire matrix
-40C - two 4x12 2-wire matrices

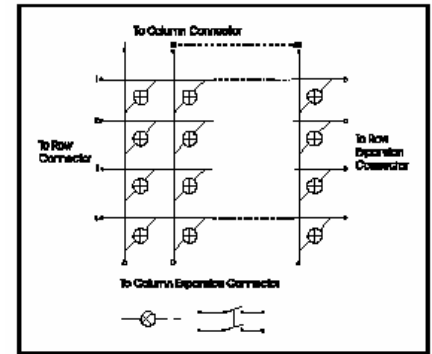
Typical Programming Syntax

Programming syntax is in the form:
"<module
address>.<group>.<row><column>"

Example: CLOSE 3.0205

This CLOSE statement will close the relay
in group 0, row 2 and column 5 on the
1260-40 at card address 3.

Note: Module is supplied with one set of mating
connectors. Additional connectors can be ordered
using the part numbers shown below.



Model 1260-40
96 two-wire crosspoints configured as two
4x12 matrices.

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 1260-40A, 2-Wire, 4x24 Matrix
Racal Instruments 1260-40B, 2-Wire, 8x12 Matrix
Racal Instruments 1260-40C, 2-Wire, Dual 4x12 Matrix
Racal Instruments Option 01*, Smart Card Module (installed)
20-Pin User Connector Body Part (2 supplied)
50-Pin User Connector Body (2 supplied)
Solder Type Pins (140 supplied)
Insertion Tool
Extraction Tool

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

PART NUMBER

404775-001
404775-002
404775-003
OPT-401901-005
601855-020
601855-050
601857
9099-1
9081-1

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