

## 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 $\Omega$

### Isolation

>10<sup>10</sup>  $\Omega$

## AC PERFORMANCE (into 50 $\Omega$ )

### Capacitance

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

### Bandwidth (-3dB)

20MHz (typical)

### Insertion Loss (50 $\Omega$ Termination)

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

### Crosstalk (50 $\Omega$ Termination)

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

## VXIBUS INTERFACE DATA

### Cooling Requirements

Airflow: 1.0 liters/sec  
Backpressure: 0.05mm H<sub>2</sub>O

### With Option 01S/T

Airflow: 2.0 liters/sec  
Backpressure: 0.2mm H<sub>2</sub>O

### Power Requirements (I<sub>pm</sub>)

+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

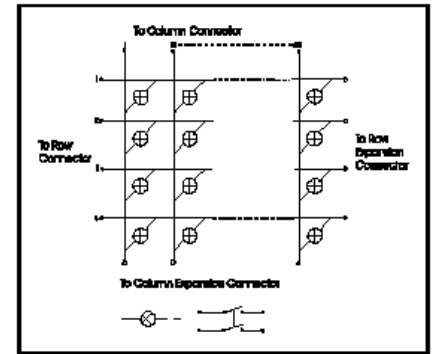
### Typical Programming Syntax

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

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.



EADS North America Defense Test and Services  
1.800.722.2528/1.949.859.8999 sales@eads-nadefense.com