

High-Density Switch Matrix

- ◆ **Configurable as Eleven Different Matrices from Four 4x16 Two-wire to One 16x16 Two-wire**
- ◆ **Latching Relays**
- ◆ **25MHz Bandwidth (4x16 configuration)**
- ◆ **Switches signals up to 1A or 300VDC**

Racal Instruments™ 1260-45 offers a high-density switching matrix in a single-slot C-size VXI module with the flexibility of configuring as any of the following:

- ◆ Four 4x16 Two-wire
- ◆ Two 8x16 Two-wire
- ◆ Two 4x32 Two-wire
- ◆ One 8x32 Two-wire
- ◆ One 4x64 Two-wire
- ◆ One 16x16 Two-wire
- ◆ Two 4x16 and One 8x16 Two-wire
- ◆ Two 4x16 and One 4x32 Two-wire
- ◆ One 4x16 and One 12x16 Two-wire
- ◆ One 4x16 and One 4x48 Two-wire
- ◆ One 4x16 and One 4x32 Two-wire

The 1260-45 utilizes guard 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. This disconnects the signal paths to the UUT upon removal of power from the test station. This guarantees that the system does not route unwanted signals when power is returned to the system. The guard relays can also be bypassed via jumpers for a full latching relay configuration.

Latching relays are useful for communication applications where the signal path must always be maintained. This allows the matrix to retain the last switch position when power is lost. The 1260-45 is controlled by the Option 01 message-based interface.

1260-45 PRODUCT SPECIFICATIONS

SWITCHING PERFORMANCE

Maximum Switchable Voltage
(Terminal-Terminal or Terminal-Chassis)
300 VDC or ACrms

Maximum Switchable Current
Per Channel: 1 ADC or ACrms

Maximum Switchable Power
Per Channel: 30 WDC, 62.5 VA

DC PERFORMANCE

Path Resistance (maximum)
≤500mΩ

Isolation
>2GΩ

AC PERFORMANCE (into 50Ω)

Capacitance (Hi to Lo)
Open Channel: <50pF
Closed Channel: <80pF

Bandwidth (-3dB)
4x16: 25MHz
4x32: 25MHz
4x64: 20MHz
16x16: 10MHz

Crosstalk

1MHz: <-50dB

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

+5V: 0.4A (2.8A with Option 01 (installed))

Dimensions

C-size, Single-slot VXIbus Module

Weight

3.07 lb (1.38 kg) without Option 01
3.35 lb (1.51 kg) with Option 01

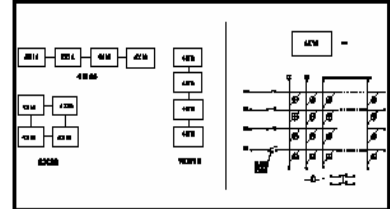
Note: Module is supplied with one set of mating connectors. Additional connectors can be ordered using the part number shown below. This module has two options: IDC (ribbon cable) or Crimp (discrete wire connectors).

Typical Programming Syntax

Programming Syntax is in the form:
“<Module Address>. <Group> <Row>
<Column>”

Example: CLOSE 3.2315

This CLOSE statement will close the relay in group 2, row 3 and column 15 on the 1260-45 at card address 3.



Model 1260-45

256 two-wire crosspoints configured as four 4x16 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 1260-45A CRIMP, Four 4x16 Matrices w/Crimp Connector
Racal Instruments 1260-45A IDC, Four 4x16 Matrices w/IDC Connector
Racal Instruments 1260-45B IDC, Two 4x32 Matrices w/IDC Connector
Racal Instruments 1260-45B CRIMP, Two 4x32 Matrices w/Crimp Connector
Racal Instruments 1260-45C CRIMP, Two 8x16 Matrices w/Crimp Connector
Racal Instruments 1260-45C IDC, Two 8x16 Matrices w/IDC Connector
Option 01*, Smart Card Module (installed)
64-pin Din Connector Body Part (4 supplied with IDC)
64-pin Din Connector Crimp Body (4 supplied with Crimp)
64-pin Din Connector Crimp Pin (256 supplied with Crimp)
Insertion Tool
Extraction Tool
Cable Assembly (for connecting two adjacent connectors)

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

PART NUMBER

407052-001
407052-101
407052-102
407052-002
407052-003
407052-103
OPT-401901-005
602004
602159-064
602159-900
990898
990899
407058

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