

Racal Instruments™

1260-45A/B/C

High-Density Switch Matrix

The Racal Instruments™ 1260-45 offers a high-density switching matrix in a single-slot C-size VXI module.

Key Features

- Configurable as 11 different matrices from four 4x16 two-wire to one 16x16 two-wire
- Latching relays
- 25 MHz bandwidth (4x16 configuration)
- Switches signals up to 1 A or 300 VDC

Product Information

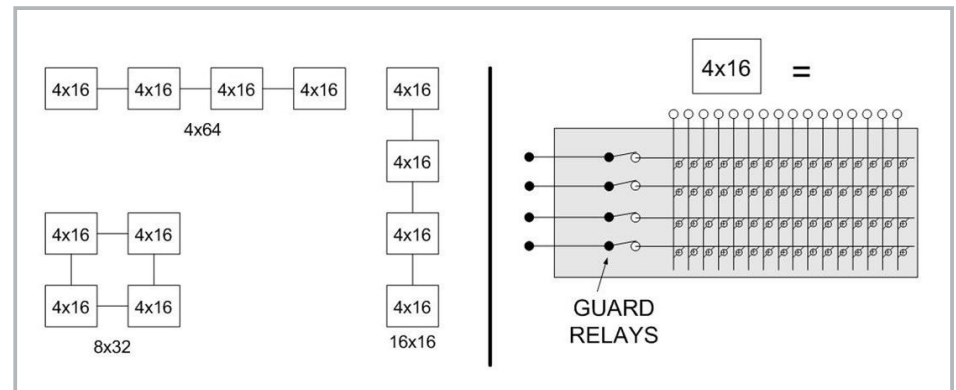
The 1260-45 provides the flexibility of configuring as any of the following:

- 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 Racal Instruments™ Option 01 message-based interface, or the Option 01T message-based and register-based interface.



256 2-wire crosspoints configured as 4 4x16 matrices

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.

Switching Performance

Maximum Switchable Voltage (Terminal-Terminal or Terminal-Chassis)

- 300 VDC or AC_{rms}

Maximum Switchable Current

- Per Channel: 1 ADC or AC_{rms}

Maximum Switchable Power

- Per Channel: 30 WDC, 62.5 VA

DC Performance

Path Resistance (maximum)

- ≤500 mΩ

Isolation

- >2 GΩ

AC Performance (Into 50 Ω)

Capacitance (Hi to Lo)

- Open Channel: <50 pF
- Closed Channel: <80 pF

Bandwidth (-3dB)

- 4x16: 25 MHz
- 4x32: 25 MHz
- 4x64: 20 MHz
- 16x16: 10 MHz

Crosstalk

- 1 MHz: <-50 dB

Interface

Power Requirements

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

Mechanical

Weight

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

Dimensions

- C-size, Single-slot VXIbus Module

Cooling Requirements

- Without Option 01/01T
 - Airflow: 1.0 l/s
 - Backpressure: 0.05 mm H₂O
- With Option 01/01T
 - Airflow: 2.0 l/s
 - Backpressure: 0.2 mm H₂O



Ordering Information

Notes: Compatible smart controllers: A smart card must be installed in the left-most slot of a set of 1260-xx series switch cards. There are two options:

- Option 01: Native command set. For use in previously designed switching systems that used the Option 01.
- Option 01T: SCPI command set. For use in new systems and previously designed systems that used the Option 01T.

The 1260-45 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).

407052-001 : Racal Instruments™ 1260-45A CRIMP

Four 4x16 Matrices w/Crimp Connector

407052-101 : Racal Instruments™ 1260-45A IDC

Four 4x16 Matrices w/IDC Connector

407052-102 : Racal Instruments™ 1260-45B IDC

Two 4x32 Matrices w/IDC Connector

407052-002 : Racal Instruments™ 1260-45B CRIMP

Two 4x32 Matrices w/Crimp Connector

407052-003 : Racal Instruments™ 1260-45C CRIMP

Two 8x16 Matrices w/Crimp Connector

407052-103 : Racal Instruments™ 1260-45C IDC

Two 8x16 Matrices w/IDC Connector

Options and Accessories:

OPT-401901-005 : Racal Instruments™ Option 01, Smart Control Module installed (manual must be ordered separately; see below)

404820-005 : Racal Instruments™ Option 01, Smart Control Module (not installed) with manual

OPT-405108-001 : Racal Instruments™ Option 01T Smart Control Module installed (manual must be ordered separately; see below)

407531-001 : Racal Instruments™ Option 01T Smart Control Module (not installed) with manual

407207 : Bracket Retainer Kit for CRIMP only

602004 : 64-Pin DIN IDC Connector Body (4 supplied)

602159-064 : 64-Pin DIN Crimp Connector Body (4 supplied with Crimp)

602159-900 : DIN Crimp Pins for 64-Pin Connector Body (256 supplied with Crimp)

990897 : Crimp Tool

990898 : Insertion Tool

990899 : Extraction Tool



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