



Racal Instruments™

1260-60A/B

Microwave Switch Module

OBSOLETE

The Racal Instruments™ 1260-60A/B is ideal for microwave applications.

Key Features

- DC to 18 GHz
- Three SPDT, 50 Ω coaxial switches
- External 50 Ω terminations (1260-60B)
- Direct SMA front panel connections
- An additional 24 SPST relays to drive external devices

Product Information

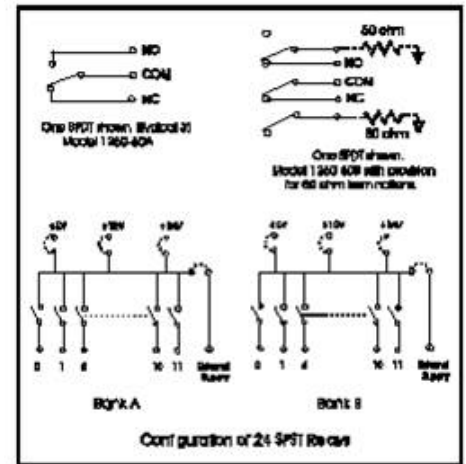
All connections are made directly to the SMA relay inputs at the front panel. This allows individual coaxial switches to be configured to provide multiplexer and matrix networks while minimizing interconnection path lengths.

The 1260-60 can be used for switching sensitive high frequency instruments while minimizing signal distortion and loss.

The 1260-60B adds terminations that keep the impedance of unused inputs properly matched.

The 1260-60 also contains 24 SPST relays in groups of 12 to drive external devices. These relays can utilize the internal supplies (+5 V, +12 V, +24 V) or an external supply to drive any device. Relay coil currents of the microwave switches are monitored to provide user-selectable confidence checking. This provides additional assurance of proper relay operation.

The 1260-60 is controlled by the Racal Instruments™ Option 01 message-based interface or the Option 01T message-based and register-based interface.



Microwave switch module configured as 3 SPDT channels

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.

Microwave Performance

(Into 50 Ω)

Frequency Range

- DC to 18 GHz

RF Impedance

- 50 Ω nominal

Maximum Power Per Channel

- 100 MHz: 400 W
- 1 GHz: 150 W
- 10 GHz: 50 W
- 18 GHz: 40 W

RF Performance

Frequency Range (GHz)	DC-4	4-8	8-12	12-18
VSWR	1.2:1	1.3:1	1.4:1	1.5:1
Insertion Loss (dB max)	0.2	0.3	0.4	0.5
Isolation (dB min)	80	70	60	60

24-Channel DC Performance

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

- 30 VDC

Number of Banks

- 2

Number of Switches per Bank

- 12, 1-wire

Maximum Switchable Current (DC or AC_{rms})

- Per Bank: 2 A

Maximum Switchable Power

- Per Module: 30 WDC, 62.5 VA
- Operating Mode: Normally Open

Interface

Power Requirements (I_{PM})

- +5 V: 0.4 A (2.8 A with Opt. 01 installed)
- +12 V: 60 mA per relay (-60 A); 130 mA per relay (-60 B)
- +24 V: 10 mA per relay (energized)

User Connector

- SMA (not supplied)

Mechanical

Weight

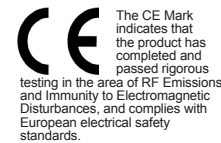
- 3.7 lb (1.678 kg) without Option 01/01T
- 4.0 lb (1.814 kg) with Option 01/01T

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.

407157-001 : Racal Instruments™ 1260-60A

18GHz Microwave Switch

407157-002 : Racal Instruments™ 1260-60B

18GHz Microwave Switch w/terminations

Options and Accessories:

OPT-401901-005 : Racal Instruments™ Option 01 Smart Control Module (Installed)

OPT-405108-001 : Racal Instruments™ Option 01T, Smart Card Module (installed)

601855-034 : 34-Pin Connector, Body Part

601857 : Connector Solder Type Pin



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