

Microwave Switch

- ◆ **DC to 18GHz**
- ◆ **Three SPDT, 50Ω Coaxial Switches**
- ◆ **External 50Ω Terminations (1260-60B)**
- ◆ **Direct SMA Front Panel Connections**
- ◆ **An Additional 24 SPST Relays to Drive External Devices**

Racal Instruments™ 1260-60 is ideal for microwave applications. 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.

Racal Instruments™ 1260-60 also contains 24 SPST relays in groups of 12 to drive external devices. These relays can utilize the internal supplies (+5V, +12V, +24V) 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 Option 01 message-based interface.

1260-60 PRODUCT SPECIFICATIONS

MICROWAVE PERFORMANCE

(INTO 50Ω)

Frequency Range

DC to 18GHz

RF Impedance

50Ω nominal

Maximum Power Per Channel

100MHz: 400W

1GHz: 150W

10GHz: 50W

18GHz: 40W

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)	60	70	60	60

24-CHANNEL DC PERFORMANCE

Maximum Switchable Voltage

(Terminal-Terminal or Terminal-Chassis)
30VDC

Number of Banks

2

Number of Switches per Bank

12, 1-wire

Maximum Switchable Current

(DC or AC rms)

Per Bank: 2A

Maximum Switchable Power

Per Module: 30WDC, 62.5VA

Operating Mode: Normally Open

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 Opt. 01 installed)

+12V: 60mA per mW relay (-60A)

+130mA per mW relay (-60B)

+24V: 10mA per relay (energized)

Weight

3.7 lb (1.678 kg) without Option 01

4.0 lb (1.814 kg) with Option 01

Dimensions

C-size, Single-slot VXIbus Module

User Connector

SMA (not supplied)

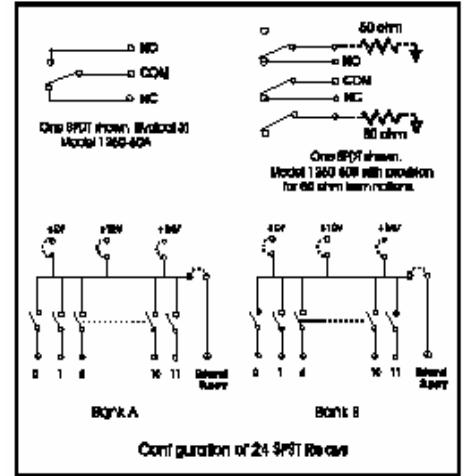
Typical Programming Syntax

Programming syntax is in the form:

"<module address>.<bank><relay>"

Example: CLOSE 1.001

This statement will close relay number 1 in bank number 0 on the 1260-60 at card address 1.



1260-60

Microwave switch module configured as three SPDT channels.

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 1260-60A, 18GHz Microwave Switch

Racal Instruments 1260-60B, 18GHz Microwave Switch w/terminations

34-Pin Connector, Body Part

Connector Solder Type Pin

Option 01*, Smart Card Module (installed)

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

PART NUMBER

407157-001

407157-002

601855-034

601857

OPT-401901-005

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.



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