## Microwave Switch Model 1260-60A/B



- DC to 18 GHz

■ Three SPDT, $50 \Omega$ Coaxial Switches

- External $50 \Omega$ Terminations (1260-60B)
- Direct SMA Front Panel Connections

■ An Additional 24 SPST Relays to Drive External Devices

The Model 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 keeps the impedance of unused inputs properly matched.

The Model 1260-60 also contains 24 SPST relays in groups of 12 to drive external devices. These relays can utilize the internal supplies (+5V, +12V, +24 V ) or an external supply to drive any device.

Relay coil currents of the microwave switches are monitored to provide userselectable confidence checking. This provides additional assurance of proper relay operation.

The 1260-60 is controlled by the Option 01 message-based interface which is explained in detail on the Smart Card Module page. All 1260 control features explained on that page are available to this module.

## 1260-60A/B Specifications

MICROWAVE
PERFORMANCE (into 50 $\Omega$ )
Frequency Range
DC to 18 GHz
RF Impedance
$50 \Omega$ nominal
Maximum Power Per Channel
100MHz: 400W
1GHz: 150W
10GHz: 50W
18GHz: 40W

## RF PERFORMANCE

| Frequency Range (GHz) | $\mathrm{DC}-4$ | $4-8$ | $8-12$ | $12-18$ |
| :--- | :--- | :--- | :--- | :--- |
| 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 <br> PERFORMANCE

Maximum Switchable Voltage
(Terminal-Terminal or Terminal-Chassis) 30VDC

## Number of Banks

 2Number 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: $0.05 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$
With Option 01S/T
Airflow: 2.0 liters/sec
Backpressure: $0.2 \mathrm{~mm} \mathrm{H}_{2} \mathrm{O}$
Power Requirements ( $\mathrm{I}_{\mathrm{pm}}$ )
$+5 \mathrm{~V}: 0.4 \mathrm{~A}$ (2.8A with Opt. 01 installed)
+12V: 60mA per mW relay (-60A)
130 mA per mW relay (-60B)
+24 V : 10 mA per relay (energized)
Weight
$3.7 \mathrm{lb}(1.678 \mathrm{~kg})$ without Option 01
$4.0 \mathrm{lb}(1.814 \mathrm{~kg})$ 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.

CThe 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.


1260-60
Microwave switch module configured as three SPDT channels.

| ORDERING INFORMATION |  |  |
| :---: | :---: | :---: |
| Model | Description | Part Number |
| $1260-60 \mathrm{~A}$ | 18 GHz Microwave Switch | $407157-001$ |
| $1260-60 \mathrm{~B}$ | 18GHz Microwave Switch w/terminations | $407157-002$ |
| $601855-034$ | 34-Pin Connector, Body Part | $601855-034$ |
| 601857 | Connector Solder Type Pin | 601857 |
| Option 01* | Smart Card Module (installed) | OPT-401901-005 |
| *One Option 01 must be ordered with switch system. Please specify the card on which Option 01 will be installed. |  |  |


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