



## Modular Microwave Switching Platform

- ◆ **Accepts 1 to 6 Microwave Switch Plug-Ins, up to 12 Switches, in a Single-Slot VXI Module**
- ◆ **Plug-Ins in 2-SPDT, SP4T, SP6T, and Transfer Switch Configurations**
- ◆ **32 Relay Driver Channels are Optional**
- ◆ **Non-Latching Switches are Supported**
- ◆ **18GHz to 26.5GHz Operation Available**
- ◆ **Plug-in Design for Low MTTR and Easy Sparring**

Racal Instruments 1260-67M is optimized for high-performance, configurable microwave switching applications.

The 1260-67M provides highly reliable and repeatable operation over a conservatively specified lifetime of >1,000,000 operations.

Should relay replacement become required, relays can be removed and replaced in less than five minutes without removing the module from the VXI system. This maximizes system uptime and facilitates field upgrades.

User connections are made directly to the relay via front panel SMA connectors, eliminating cumulative losses and induced noise.

The module is configurable to the user's requirements with 2-SPDT, SP4T, SP6T and transfer switch plug-ins with non-latching control available.

An Option 01T is required to communicate with 1260 series modules, and provides message-based operation for ease of use and register-based operation for maximum speed. The Option 01T mounts in the leftmost 1260 series module and does not consume any VXI slots. The Option 01T provides a single point of software control for the switching system with advanced features such as include, exclude, scan, relay monitoring, user defined path names, and reset states.

Racal Instruments 1260 series line includes VXI plug&play support for Win95/NT/2000/XP operating systems including drivers for LabWindows/CVI and LabView. Please refer to the Option 01T data sheet for additional product features and specifications.

# 1260-67M PRODUCT SPECIFICATIONS

## MICROWAVE PERFORMANCE

### Frequency Range

DC to 26.5 GHz

### Impedance

50  $\Omega$

### Configurations

2-SPDT, SP4T,  
SP6T, Transfer Switch

### Maximum Power (typical)

100 MHz: 450 W  
1 GHz: 180 W  
10 GHz: 50 W  
18 GHz: 40 W  
26.5 GHz: 3 W (Avg.)

### Switching Sequence

Break-before-make

### Operating Modes

Normally Open,  
Failsafe

## 32-CHANNEL DC PERFORMANCE

Two 16x1 Banks

30 VDC Max

Per Bank: 4 A

Per Switch: 0.5 A

### Maximum Switchable Power

30 WDC, 62.5 VA per Module

### Operating Mode

Normally open

## VXIBUS INTERFACE DATA

### Cooling (w/ Option 01T)

1.2 liter/sec @ 0.08 mm H<sub>2</sub>O

### Power Requirements

+5 VDC at 2.6 A w/Option 01T

+5 VDC at 1.6 A w/o Option 01T

+12 VDC at 320 mA per energized RF switch

## ENVIRONMENTAL DATA

### Temperature

Operating: 0° C to 55° C

Storage: -40° C to 71° C

### Relative Humidity

5 to 95  $\pm$  5% RH non-condensing,

75  $\pm$  5% RH above 30° C,

45  $\pm$  5% RH above 45° C

### Altitude

Operating: 15,000 ft.

Non-Operating: 15,000 ft.

## Shock

30 g, 11ms, 1/2 sine wave

## Vibration

Random, 5-500 Hz

## Bench Handling

4-inch drop at 45°

## EMC

EN61326:1997+A1:1998,

Class A

## Safety

EN61010-1:1993+A2:1995

## RELIABILITY

### MTBF

57,569 hours (each matrix card)  
(MIL-STD-217E)

### MTTR

$\leq$ 5 min.

## MECHANICAL

### Weight

19 lbs.

### Dimensions

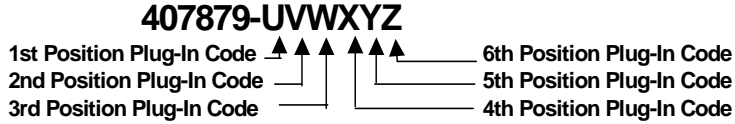
3.5" H x 16.5" W x 19.5" D

Frequency Range	DC-3 GHz	3-8 GHz	8-12 GHz	12-18 GHz	18-26 GHz
Insertion Loss	0.2	0.3	0.4	0.5	0.8
Isolation	80	70	60	60	45
VSWR (MAX)	1.2:1	1.3:1	1.4:1	1.5:1	1.9:1



# 1260-67M ORDERING INFORMATION

Construct the 1260-67M part number by filling in the required model codes from the table at each position in the Carrier Module as shown in the diagram. Spare plug-ins or blanking plates are ordered by specifying the full 10 digit part numbers.



## ORDERING INFORMATION

(see table for plug-in options and part number specifications)

<u>MODEL/PLUG-IN CODE</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
1260-67M	Racal Instruments 6 Position Microwave Switch Carrier Module	407879-UVWXYZ
0	Blanking Plate (specify where no plug-in installed)	457093
9	32-Channel Relay Driver Plug-in Module	407881-032
1	1 Transfer Switch @ 18 GHz Plug-In	407882-101
2*	2 SPDT @ 18 GHz Plug-In	407882-302
3	1 SP4T @ 18 GHz Plug-In	407882-104
4	1 SP6T @ 18 GHz Plug-In	407882-106
5	1 Transfer Switch @ 26.5 GHz Plug-In	407882-201
6*	2 SPDT @ 26.5 GHz Plug-In	407882-402
7	1 SP4T @ 26.5 GHz Plug-In	407882-204
8	1 SP6T @ 26.5 GHz Plug-In	407882-206
Option O1T	Message/Register-Based Switch Controller – Installed	OPT-405108-001

\* These plug-ins fill 2 positions

**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.

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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