



## VXIbus Optical Switch Module

- ◆ **Ideal for SONET Testing**
- ◆ **High Repeatability for Accurate Testing**
- ◆ **Modular VXIbus Architecture**
- ◆ **Quick Delivery from Stock**
- ◆ **Optional Overnight Depot Spare**
- ◆ **Special Configurations Readily Available**

Racal Instruments™ 1260-84 series optical switch modules bring the advantages of the modular VXIbus architecture to optical systems test. Modules can quickly and easily be removed and replaced for maximum system uptime. In addition, we offer overnight depot spares contracts to free you from stocking spares.

These optical switch modules are ideal for SONET test, fiber-optic component test, and fiber network monitoring.

The 1260-84A single 1 x 4 topology is used primarily for simplex switching. The 1260-84B dual 1 x 4 topology can be used for simplex or duplex switching. The 1260 series "include" command permits simultaneous closure of both switches with a single software command, when a duplex scheme is required.

Also, the 1260-84 modules feature diffraction-limited collimating lenses to achieve precise switching of optical channels. This implementation provides highly repeatable switch paths, facilitating the construction of highly accurate optical test systems. These switches are optically passive and operate independently of data rate, data format, and optical signal direction.

The 1260 series line includes VXI *plug&play* support of Win95/NT frameworks including drivers for LabWindows/CVI and LabView. Please refer to the Option 01T data sheet for additional product features and specifications.

# 1260-84 PRODUCT SPECIFICATIONS

## PERFORMANCE

### Optical Fiber Type

9/125  $\mu$ m, single-mode fiber  
(Other fiber types available upon request)

### Wavelength Range

1290-1570nm

### Insertion Loss (See Note 2)

<1.2dB maximum, 0.6dB typical

### Back Reflection (See Note 2)

<-55dB maximum, -60dB typical

### Polarization Dependant Loss

(See Note 3)  
0.05dB maximum

### Repeatability (See Note 4)

+/- 0.03dB sequential switching,  
+/- 0.010dB typical

### Isolation

>80dB minimum, 90dB typical

## INTERFACE DATA

### Cooling Requirements

1.0 liters/second @ 0.025mm H<sub>2</sub>O,  
(1260-84B-2)

### Power Requirements

+5VDC @ 0.4A  
+5VDC @ 1.4A w/Option 01T  
+12VDC @ 0.25A, 1260-84A  
+12VDC @ 0.5A, 1260-84B

## ENVIRONMENTAL DATA

### Temperature

Operating: 0°C to 50°C  
Storage: -20°C to 70°C

### Relative Humidity

90% non-condensing to 40% C for 5 days

### Shock

30g, 11msec, 1/2 sinewave

### Vibration

0.013" peak-to-peak, 5-55Hz

### Bench Handling

4 inch drop at 45°

## EMC

### Emissions

EN55011A with limits in accordance with  
EN50081-1

### Immunity

IEC801-2, 3, 4 with limits in accordance  
with EN50082-1

### Safety

EN61010-1

## RELIABILITY

### Switching Time

325msec +16msec/channel maximum

### Rated Switch Operations

>10<sup>7</sup> operations minimum

### MTBF

>100,000 hours, minimum

## MECHANICAL

### Weight (1260-84B)

4.8 lbs. (2.18kg) w/Option 01T 5.1lbs.  
(2.31kg)

### Dimensions

1260-84A One Slot, C-size  
1260-84B Two Slot, C-size

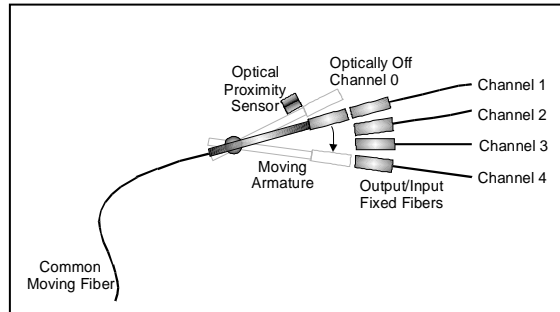
### Front Panel Interface Connector

FC Style

(Other style interface connectors  
available upon request)

### Notes:

1. All specifications are referenced without connectors and measured at 23°C +/- 5°C.
2. Connectors have typically less than 0.25dB insertion loss and -45dB back reflection.
3. Measured at 1550nm. PDL typically less than 0.02dB per mated connector pair.
4. 100 cycles measured at constant temperature after 1-hour warm-up. Interface cables are not supplied with the module(s).



1260-84A/B

**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 1260-84A-1, Single 1 x 4 Optical Switch Module, 1-slot  
Racal Instruments 1260-84B-1, Dual 1 x 4 Optical Switch Module, 1-slot  
Additional User Manual

\*One Option 01T must be ordered with switch card(s). Please specify the card on which Option 01T will be installed.

### PART NUMBER

407692-001  
407692-002  
980673-057

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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