

VXIbus Optical Switch Module

- ◆ **Ideal for SONENT 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 SONENT 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 μ 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 H₂O,
(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

>10⁷ 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

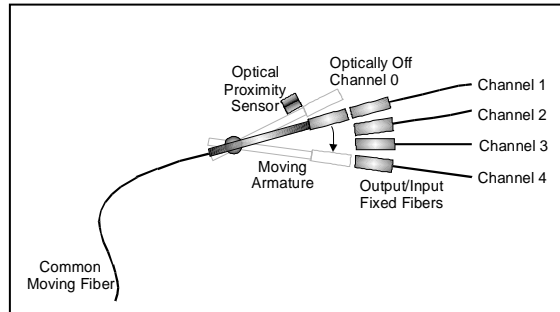
Front Panel Interface Connector

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

PART NUMBER

407692-001
407692-002
980673-057

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

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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