

VXIbus Optical Attenuator Module Model 8800



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

The 8800 optical attenuator module brings 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, Racal offers overnight depot spares contracts to free you from stocking spares.

These optical attenuator modules are ideal for SONET test, fiber-optic

component test, and fiber network monitoring.

The 8800 modules feature a linear absorbing glass prism to achieve precise attenuation of optical channels. This implementation provides highly repeatable attenuation, low polarization sensitivity, low distortion, and high linearity facilitating the construction of highly accurate optical test systems. These

attenuators are optically passive and operate independently of data rate, data format, and optical signal direction.

The model 8800 provides message-based operation for ease of use.

The 8800 series line includes *VXIplug&play* support of Win95/NT frameworks including drivers for LabWindows/CVI and LabView.

8800 SPECIFICATIONS¹

PRELIMINARY

PERFORMANCE

OPTICAL FIBER TYPE

9/125µm, single-mode fiber
(Other fiber types available upon request)

WAVELENGTH RANGE

1200-1700nm

ATTENUATION RANGE

>60dB

RESOLUTION

.01dB

INSERTION LOSS

≤2.5dB maximum

1.9dB typical

BACK REFLECTION

≤-45dB maximum

≤-50dB typical

POLARIZATION DEPENDANT LOSS

(See Note 2)

0.15dB maximum

0.05dB typical

REPEATABILITY

(SEE NOTE 3)

+/- 0.05dB maximum

+/- 0.01dB typical

ACCURACY

1310nm +/- 0.15dB (typically .05dB)

1550nm +/- 0.15dB (typically .05dB)

MAXIMUM OPTICAL INPUT POWER

≤ 200mW

ISOLATION

>100dB minimum, with shutter
closed

ADJUSTMENT TIME

<4 sec maximum, 0 to 60dB

INTERFACE DATA

COOLING REQUIREMENTS

1.2 liters/second @

0.01mm H₂O

POWER REQUIREMENTS

+5VDC @ 1.0Amps

+24VDC @ 0.5Amps

ENVIRONMENTAL DATA

TEMPERATURE

Operating: 0°C to 50°C

Storage: -40°C to 70°C

RELATIVE HUMIDITY

95% non-condensing to 30°C

SHOCK

30g, 11msec, ½ sinewave

VIBRATION

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

BENCH HANDLING

4-inch 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

MTBF

>100,000 hours, minimum

MECHANICAL

WEIGHT

3.6lbs. (1.63kg)

DIMENSIONS

2-Slot, C-size, VXIbus module

FRONT PANEL INTERFACE

CONNECTOR

(SEE NOTE 4)

FC Style

(Other style interface connectors available upon
request)

Notes:

1. All specifications are referenced with connectors and measured at 25°C ±5°C.
2. Measured at 1550nm and 1310nm.
3. 100 cycles measured at constant temperature after 1-hour warm-up.
4. Interface cables are not supplied with the module(s).

ORDERING INFORMATION

Model	Description	Part Number
8800	Optical Attenuator Module	407715
980845	Additional 8800 User Manual	980845
980846	8800 Maintenance Manual	980846

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 Racal policy is one of continuous development and consequently the equipment may vary in detail from the description and specification in this publication.

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