

Product Data Sheet

Fiber Optical Power Meters and Visual Fault Locators



FOPM-100-R2

Overview

The Fiber Optical Power Meters are designed to work in laboratories, LANs, WANs, and CATV environments, as well as long-distance fiber optic networks. They work with our stabilized laser light sources, and can be used to identify optical fiber, measure optical attenuation, verify continuity, and evaluate fiber link transmission quality.

Features

Basic Optical Power Meter (FOPM-100-R2, FOPM-150)

- This basic power meter is ideal for data centers, labs, and occasional fiber testing.
- Works at six wavelengths: 850, 1300, 1310, 1490, 1550, and 1625 nm.
- Referencing function helps ensure efficiency, even when two units are far apart.
- An auto-off feature saves battery power.
- Includes a rechargeable lithium ion battery and an AC adapter.
- LCD backlight enables you to work in the dark.
- Features a linear and logarithmic power display.
- Includes FC/PC, SC/PC, and ST/PC connectors.

Deluxe Optical Power Meter with Memory (FOPM-210-R2, FOPM-250)

- Get all the features of the Basic model, plus:
- Auto wavelength recognition automatically uses the proper calibration parameters and decreases the potential for errors.

At a Glance

- Easy-to-use, straightforward operation.
- Backlit LCD.
- Ruggedized design.
- Select models have storage capabilities.

- Has a data storage capacity of 999 items.
- Transfer data to a PC via a USB connection. With the included software, data can be saved as an Excel® file or plain text.

Deluxe Optical Power Meter with Memory and Light Source (FOMM-200)

- Get a power meter and 3-wavelength infrared laser light source in one.
- This compact combo for fiber installation and maintenance is easy to use and lightweight.
- 2-in-1 unit is ideal for one tech to test cables and data center links.
- Auto wavelength recognition automatically uses the proper calibration parameters and decreases the potential for errors.
- Boasts a large data storage capacity of 999 items.
- Convenient for field testing and later transferring the results to a PC.
- Includes software and a USB interface.
- Interchangeable connectors available for both power meter and laser source.

Mini Optical Power Meter (FOPM-MINI1, FOPM-MINI2)

- These tiny units have all the features of the Deluxe Optical Power Meter.

Visual Fault Locators (FOVFL-MINI, FOVFL-PEN)

- Use the FOVFL-MINI to detect sharp bends and breaks in jacketed or bare fiber. Output power is 1 mw maximum.
- The pen-style FOVFL-PEN laser source outputs 8 dBm.

Fiber Optical Power Meters and Visual Fault Locators Data Sheet

Comparison Chart

Fiber Optical Power Meters						
Part Number	Measuring Range	Auto-Off	Connectors Included	Auto-Wavelength Recognition	USB	Storage Capacity
FOPM-100-R2	-60 to +3 dBm	Yes	FC/PC, SC/PC, ST/PC	No	Yes	None
FOPM-150	-40 to +23 dBm	Yes	FC/PC, SC/PC, ST/PC	No	Yes	None
FOPM-210-R2	-70 to +10 dBm	Yes	FC/PC, SC/PC, ST/PC	Yes	Yes	1000 items
FOPM-250	-50 to +26 dBm	Yes	FC/PC, SC/PC, ST/PC	Yes	Yes	1000 items
FOMM-200	-70 to +10 dBm	Yes	FC/PC, SC/PC, ST/PC	Yes	Yes	999 items
FOPM-MINI1	-70 to +10 dBm	No	Universal 2.5-mm	No	No	No
FOPM-MINI2	-50 to +26 dBm	No	Universal 2.5-mm	No	No	No
Visual Fault Locators						
Part Number	Wavelength	Connectors	Emitter Type	Modulated Frequency	Output Power	
FOVFL-PEN	650±10	2.5-mm and 1.25-mm	FP, LD	2 to 3 Hz	1 mW (10 mW optional)	
FOVFL-MINI	650±10	2.5-mm	FP, LD	2 Hz	1 mW (10 mW optional)	

Basic Optical Power Meter (FOPM-100-R2)



FOPM-100-R2

Specifications

Optical Specifications	
Measuring Range	-60 to +3
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Connectors	FC/PC, (SC/PC and ST/PC interchangeable connectors optional)
Detector Type	InGaAs
Accuracy	±0.35 dB ±10 nW
Resolution	0.01 dB
Linearity	±5%
Auto Power Off	Yes
Backlight	Yes
Reference Value	Yes
General Specifications	
Power Supply	(3) AAA batteries, 5 VAC/DC adapter <i>NOTE: FOPM-100-R2 does not support a charging function.</i>
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Dimensions	1.2"H x 2.4"W x 4.5"D (3 x 6.2 x 11.5 cm)
Weight	3.1 lb.(1.4 kg)

Basic Optical Power Meter (FOPM-150)



FOPM-150

Specifications

Optical Specifications	
Measuring Range	-40 to +23
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Connectors	FC/PC, (SC/PC and ST/PC interchangeable connectors optional)
Detector Type	InGaAs
Accuracy	± 0.35 dB ± 10 nW
Resolution	0.01 dB
Linearity	$\pm 5\%$
Auto Power Off	Yes
Backlight	Yes
Reference Value	Yes
General Specifications	
Power Supply	(3) AAA batteries, 5 VAC/DC adapter <i>NOTE: FOPM-150 does not support a charging function.</i>
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Dimensions	1.2"H x 2.4"W x 4.5"D (3 x 6.2 x 11.5 cm)
Weight	3.1 lb.(1.4 kg)

Deluxe Optical Power Meter with Memory (FOPM-210-R2)



FOPM-210-R2

Specifications	
Optical Specifications	
Measuring Range	-70 to +10 dBm
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Connectors	FC/PC (SC/PC, ST/PC interchangeable connectors optional)
Detector Type	InGaAs
Accuracy	±5% dB ±1 nW
Resolution	0.01 dB @ -60 to +10 dBm; 0.1 dB @ -70 to +60 dBm
Linearity	±5%
Tone Detection (Hz)	270, 1000, 2000
General Specifications	
Power Supply	(2) AA batteries; AC adapter for continuous use, Also power via USB
Auto Power-off	Yes
Backlighting	Yes
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Humidity Tolerance	Less than 90%
Dimensions	6.3"H x 3"W x 1.8"D (16 x 7.6 x 4.5 cm);
Weight	0.59 lb. (0.27 kg)
Data Storage	1000 data items

Deluxe Optical Power Meter with Memory (FOPM-250)



FOPM-250

Specifications	
Optical Specifications	
Measuring Range	-50 to +26 dBm
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Connectors	FC/PC (SC/PC, ST/PC interchangeable connectors optional)
Detector Type	InGaAs
Accuracy	±5% dB ±10 nW
Resolution	0.01 dB @ -40 to +26 dBm; 0.1 dB @ -50 to +40 dBm
Linearity	±5%
Tone Detection (Hz)	270, 1000, 2000
General Specifications	
Power Supply	(2) AA batteries; AC adapter for continuous use, Also power via USB
Auto Power-off	Yes
Backlighting	Yes
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Humidity Tolerance	Less than 90%
Dimensions	6.3"H x 3"W x 1.8"D (16 x 7.6 x 4.5 cm);
Weight	0.59 lb. (0.27 kg)
Data Storage	1000 data items

Deluxe Optical Power Meter with Memory and Light Source (FOMM-200)



FOMM-200

Specifications	
Optical Specifications	
Measuring Range	-50 to +26 dBm
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Connectors	FC/PC (SC/PC, ST/PC interchangeable connectors optional)
Detector Type	InGaAs
Accuracy	±5% dB ±10 nW
Resolution	0.01 dB @ -40 to +26 dBm; 0.1 dB @ -50 to +40 dBm
Linearity	±5%
Tone Detection (Hz)	270, 1000, 2000
General Specifications	
Power Supply	(2) 1.2-V Ni-MH batteries; AC adapter for continuous use
Auto Power-off	Yes
Backlighting	Yes
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Humidity Tolerance	Less than 90%
Dimensions	6.3"H x 3"W x 1.8"D (16 x 7.6 x 4.5 cm);
Weight	0.59 lb. (0.27 kg)
Data Storage	1000 data items

Mini Optical Power Meter (FOPM-MINI1)



FOPM-MINI1

Specifications	
Optical Specifications	
Measuring Range	-70 to +10 dBm @ 1550 nm
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Working Wavelength	800 to 1700
Connectors	2.5-mm universal
Detector Type	InGaAs
Accuracy	0.35 dB \pm 1 nW
Resolution	0.01 dB
General Specifications	
Power Supply	(2) AAA batteries
Battery Life	230 hours (3500 hours standby)
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Humidity Tolerance	Less than 90%
Dimensions	4.7"H x 1.3"W x 1.2"D (11.9 x 3.3 x 3.1 cm);
Weight	0.15 lb. (2.4 oz.)

Mini Optical Power Meter (FOPM-MINI2)



FOPM-MINI2

Specifications	
Optical Specifications	
Measuring Range	-50 to +26 dBm @ 1550 nm
Calibrated wavelength (nm)	850/1300/1310/1490/1550/1625
Working Wavelength	800 to 1700
Connectors	2.5-mm universal
Detector Type	InGaAs
Accuracy	0.25 dB \pm 10 nW
Resolution	0.01 dB
General Specifications	
Power Supply	(2) AAA batteries
Battery Life	230 hours (3500 hours standby)
Operating Temperature	14 to 122° F (-10 to +50° C)
Storage Temperature	-4 to +158° F (-20 to +70° C)
Humidity Tolerance	Less than 90%
Dimensions	4.7"H x 1.3"W x 1.2"D (11.9 x 3.3 x 3.1 cm);
Weight	0.15 lb. (2.4 oz.)

Visual Fault Locator, Pen-Style (FOVFL-PEN)



FOVFL-PEN

Specifications	
Optical Specifications	
Wavelength (nm)	650 ±10
Connectors	Universal Standard 2.5-mm connector and 1.25-mm external adapter
Emitter Type	FP, LD
Modulated Frequency	2 to 3 Hz
Output Power	1 mW (10 mW optional)
General Specifications	
Power Supply	(2) AA alkaline batteries
Battery Life	>15 hours
Operating Temperature	14 to 113° F (-10 to +45 C)
Storage Temperature	-40 to +158° F (-40 to +70° C)
Humidity Tolerance	Less than 95%
Dimensions	7.1"H x 0.6"W (18 x 15 cm)
Weight	4.2 oz. (120 g)

Visual Fault Locator, Mini (FOVFL-MINI)



FOVFL-MINI

Specifications	
Optical Specifications	
Wavelength (nm)	650 ±10
Connectors	Universal 2.5-mm
Emitter Type	FP, LD
Modulated Frequency	2 Hz
Output Power	1 mW (10 mW optional)
General Specifications	
Power Supply	(2) AAA alkaline batteries
Battery Life	>40 hours
Operating Temperature	14 to 140° F (-10 to +60 C)
Storage Temperature	14 to +158° F (-10 to +70° C)
Humidity Tolerance	Less than 95%
Dimensions	3.9"H x 1.2"W x 0.7"D (10 x 3 x 1.8 cm)
Weight	2 oz. (60 g)

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Ordering Information

Item	Code
Optical Power Meters	
Basic	FOPM-100-R2
Deluxe with Memory	
-70 to +10 dBm measuring range	FOPM-210-R2
-50 to +26 dBm measuring range	FOPM-250
Deluxe with Memory and Light Source	FOMM-200
Mini Optical Power Meters	
with +10 to -70 dBm @1550 nm display range	FOPM-MINI1
with +26 to -50 dBm @1550 nm display range	FOPM-MINI2
Visual Fault Locators	
with Universal Standard 2.5-mm connector and 1.25-mm external adapter, Pen-Style Laser Source	FOVFL-PEN
with Universal 2.5-mm connector, Compact	FOVFL-MINI

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