Mini Optical Power Meter | Portable Multi-Function Fiber Tester

Product model: F1M/F1N

Application areas:

Optical cable construction

Optical fiber communication

Network maintenance

Product Overview

This mini optical power meter is a portable test instrument designed for fiber optic communications and cable construction and maintenance. It integrates numerous practical functions, supports dual display modes for linear (mW) and nonlinear (dBm), and is compatible with various fiber interfaces, including SC, FC, and ST. It is suitable for a variety of fiber optic testing scenarios. Whether in field construction or indoor maintenance, it provides accurate and convenient optical power measurement.

Core Feature Highlights :

- Dual display mode : Simultaneously displays linear (mW) and nonlinear (dBm) values, allowing you to see test data at a glance without switching interfaces.
- Multi-wavelength testing : supports 8 test wavelengths : 850nm / 980nm / 1300nm / 1310nm / 1490nm / 1550nm / 1625nm / 1650nm, meeting various fiber optic system testing needs.
- Intelligent operation design :

Automatic shutdown : The default setting is 10 minutes to automatically shut down, which is energy-saving and environmentally friendly.

Backlight and red light function : Supports backlight illumination and 650nm red light source (optional flashing mode), which facilitates operation in low-light environments and fiber identification.

One-touch reference setting : Short press the REF button to set the reference value and quickly enter the insertion loss test mode.

- RJ45 network cable test (optional) : supports network cable sequence testing, one device for multiple uses, improving work efficiency.
- Long-lasting power supply : Uses 2 AAA batteries or rechargeable lithium batteries, with a battery life of up to 72 hours . It supports external power bank or computer power supply, making it suitable for long-term field operations.

Solve customer pain points :

1. The test equipment was bulky and difficult to carry---The compact and portable design fits easily into a tool bag.
2. The test data was not intuitive---The mW/dBm dual display provides clear and easy-to-understand data.
3. The interface was incompatible---The tester now supports SC, FC, and ST interfaces for high versatility.
4. The battery life was short and required frequent charging---The tester now has an ultra-long battery life of 72 hours and supports external power.
5. The tester has limited functionality and requires multiple devices---The integrated optical power, red light, and RJ45 tester allows for multiple uses.

Technical Parameters :

Project	**Specification**
Wavelength range	800–1700 nm
Connector Type	FC / SC / ST
Probe type	InGaAs
Power measurement range	-70 ~ +6 dBm / -50 ~ +26 dBm
Uncertainty	±5%
Display resolution	Linearity: 0.1%, Non-linearity: 0.01 dBm
Visual fault locator (optional)	1mW/10mW/20mW/30 mW/50mW
Operating temperature	-10°C ~ +60°C
Storage temperature	-30°C ~ +70°C
Automatic shutdown time	10 minutes
Battery operating time	>72 hours
Size	112×66×30 mm

Why choose our optical power meter?

- Designed for the site : lightweight and durable, suitable for various construction environments.
- Accurate and reliable : High-precision measurement, supports user calibration.

- Easy operation : intuitive interface, one-touch switching function.
- Long-lasting battery life : supports multiple power supply methods and operates without power interruption.
- Comprehensive functions : From optical power testing to red light and network cable testing, covering common operation and maintenance needs.