OPM150
Optical Power Meter

User Guide _ Version 1.0

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- The label with S/N has been altered or damaged.

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Service & Support

If you have any questions or need any assistance, please contact our service center.

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Address: 9F.-6, No. 12, Fuxing 4th Rd., Qianzhen Dist., Kaohsiung City 806611, Taiwan (R.O.C.)

Please prepare the following information before you contact us and describe the problems.

- Product model and S/N
- Warranty information

Content

1. Safety Information

Read all safety information carefully before using this product to ensure personal safety and proper use.

- Assure the power supply conforming to the specification of this product and qualified for the country of use.
- Use batteries that meet the specifications of this product.
- Do not use damaged power cords, accessories or other peripheral equipment.
- Make sure the product is operated on the permitted ambient conditions.
- Never directly look into the optical outputs interface.
- Dangerous laser radiation: 

2. Introduction

The Ascentac OPM150 Series is a high-performance optical power meter engineered for high-precision measurements across a wide dynamic range. Designed to meet diverse testing requirements, it offers measurement ranges of +6 to -70 dBm or +26 to -50 dBm. This series stands out with its exceptional sensitivity, superior linearity, and rapid testing speeds, all while maintaining an intuitive user interface. For added versatility, the OPM150 also features a built-in Visual Fault Locator (VFL).

The Ascentac OPM150 Series supports 10 calibrated wavelengths (850nm, 980nm, 1270nm, 1300nm, 1310nm, 1490nm, 1550nm, 1577nm, 1625nm, and 1650nm), making it ideal for characterizing both single-mode (SM) and multi-mode (MM) fiber networks. Users can seamlessly toggle between absolute power (dBm/mW) and relative loss (dB) measurements to suit specific field or lab scenarios.

Featuring a high-contrast OLED display, the OPM150 ensures clear visibility in various lighting conditions. Its ergonomic, handheld palm-sized design is lightweight for maximum portability, yet ruggedly built to withstand demanding field environments. The OPM150 Series is the ultimate cost-effective solution for professionals seeking durability without compromising on performance.

2.1 Features

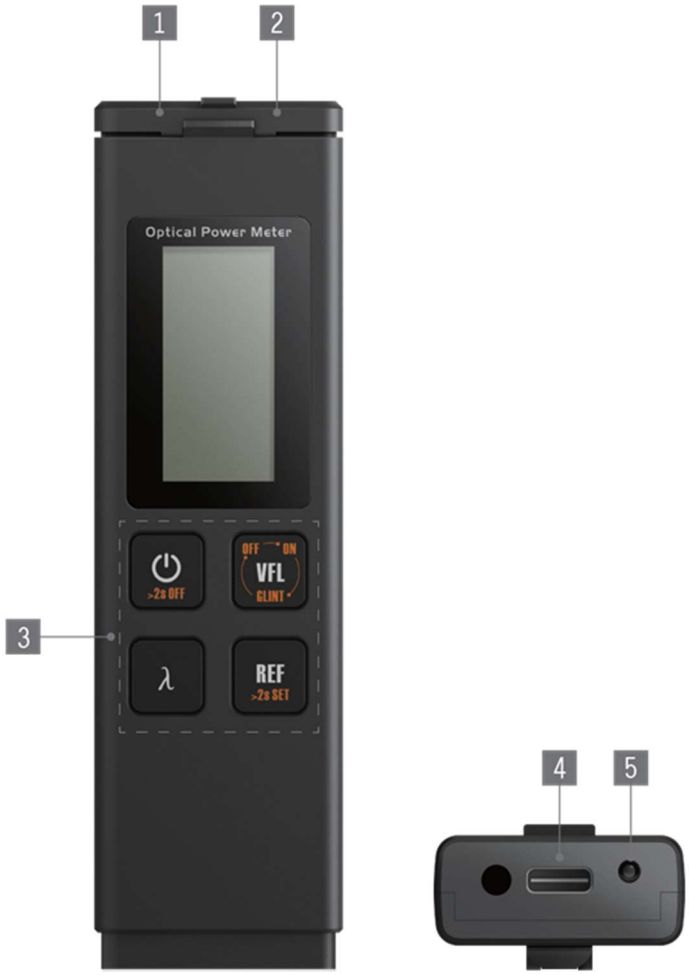
- 10 Calibrated Wavelengths
- Wide Dynamic Range up to 76 dB
- Wavelength Memory Function
- Auto-Power Off for Energy Saving
- Multi-Unit Display: Supports power measurements in dBm and mW, as well as relative loss in dB.

2.2 Application

- Installation and maintenance of fiber optic communications and CATV networks.

3. Product Description

3.1 Appearance



1. OPM Port
2. VFL Port
3. Function Keys
4. Type-C Port
5. Charging Indicator

3.2 Instruction

Icon	Function	Description
	Power Button	Long press for 2 seconds: Power ON or OFF
	Wavelength Switching	Short press: Switch the operating wavelength
	1. Enable Visual Fault Locator (VFL) 2. Toggle VFL Operating Modes	Short press: Toggle through VFL modes – ON / Flash / OFF The icons“ ✷ ”at the top of the screen will display the synchronized status. VFL Modulation Rate: ≈4Hz
	Set Reference Level	Short press: Set the current optical power as the reference value.
	Save Optical Power Value	Long press for 2 seconds: Save the current power measurement. (Stored data includes: Record number, wavelength, and optical power value.)

4. Operation

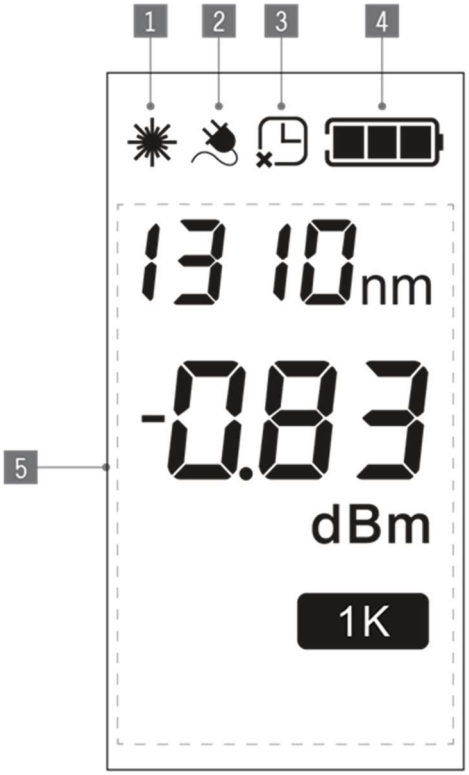
4.1 Power-on & Power-off

Short press the button "  " to turn on the device; the Auto-Power Off (Energy Saving) function will be activated automatically.

With Energy Saving mode enabled, the device will automatically shut down after 10 minutes of inactivity. A beep will sound to notify the user upon shutdown.

Note:
The device records the last operating wavelength upon shutdown.

4.2 Main Menu



1. VFL Icon
2. External Power Icon
3. Auto-Power Off Icon
4. Battery Level Indicator
5. Measurement Display Area

5. Setting

OPM Wavelength Setting

Short Press “  ” cycle through the calibrated wavelengths. The OPM supports 10 calibrated wavelengths: 850nm, 980nm, 1270nm, 1300nm, 1310nm, 1490nm, 1550nm, 1577nm, 1625nm, and 1650nm.

REF Value Viewing and Setting

While a light source is detected, long press the button “  ” to set the current wavelength's REF reference value. Each calibrated wavelength features its own independent REF setting.

Short press the button “  ” to view the REF reference value and the relative REF difference for the current wavelength.