

This Handheld OpticPower Meter(H-OPM) has the advantages of fully functional and reliable performance. Widely used in optical fiber construction and maintenance, optical fiber communication, optical fiber sensing, optical CATV and other fields. Instrument mould adopts advanced cold shell molding process; beautiful and durable, Instrument mould Design meets Ergonomic requirements. The H-OPM uses the built-in detector, which can be protected well. With a small shape, you can choose the backlight display and automatic shutdown function, with ultra wide optical power testing range.

Note: the version of the instruction is subject to change without notice.

Product features:

- ◆ Support linear mW and nonlinear index dBm simultaneous display
- ◆ Support automatic shutdown
- ◆ Support backlight selection
- ◆ Support user self-calibration
- ◆ Support restore factory settings
- ◆ Supports FC, SC, and ST interfaces
- ◆ Working time is longer than 120 hours

Technical index:

Wavelength range	800nm~1700nm	800nm~1700nm
Optical Connector	FC/SC/ST	FC/SC/ST
Detector type	InGaAs	InGaAs
Measurement range	-70dBm~+10dBm	-50dBm~+26dBm
Accuracy	±5%	
Standard wavelength	850/980/1300/1310/1490/1550/1625/1650nm	
Display resolution	mW: 0.1% dBm: 0.01dBm	
650nm VFL (optional)	2mw/5mw/10mw/20mw/30mw/50mw	
Laser source (optional)	850/1300/1310/1490/1550/1625/1650nm	
Laser source stability	0.02dB	
Working temperature	-10~+60℃	
Storage temperature	-30~+70℃	
Auto off time	10 min	
Battery continuous operating time	≥120 h	
Structure size	186mm*100mm*50mm	
Power	Three section 5 batteries/Lithium battery (optional)	
Instrument net weight	240g	

Note:

- 1.Wavelength range: A standard operating wavelength range from 800nm to 1700nm is specified. Within this wavelength range, the optical power meter operates under specified specifications.
- 2.Power measurement range: the maximum power range can be measured according to the required index.
- 3.Accuracy: the error between the measured results of a given optical power and the measured

results of the standard optical power.

Operation instructions:

#### 1. Turn on / off

Optical power meter: Press within a second to start. Long press this button, you can power off.

Lightwave multimeter: Press within a second to start. Long press this button, you can power off.

Press this button to turn on or off the backlight.

#### 2.AUTO

Press the key to turn off or turn on the automatic shutdown function; the upper left corner of the LCD will display the prompt at the same time; the automatic shutdown time is 10min.

#### 3.ZERO

Long press this key to realize the optical power meter automatically reset, LCD right upper corner will show prompt.

#### 4.LIGHT

Optical power meter: Press this key to turn off or turn on the backlight; LCD displays the prompt at the top left corner.

Optical power meter with 650nm laser: Short press this button to turn off or turn on the backlight. Long press this button to turn on or turn off 650nm laser; When the red light is turned on, the red light can be normally opened and flashing with a short press of the key.

Lightwave multimeter: Press this key to turn off or turn on the laser light source. LCD right upper corner will show prompt.

#### 5.dB

The relative measurement of optical power can be carried out at the corresponding wavelength.

#### 6.λ

8 different test wavelengths can be selectable (850nm、980nm、1300nm、1310nm、1490nm、1550nm、1625nm、1650nm) , LCD display at the same time after setting.

LCDDisplay description:

The measured power values are displayed in the form of dB, dBm, mW, uW and nW. There are 8 kinds of display wavelengths.

Calibration function description:

1.Press "zero" + "light" buttons at the same time to enter calibration mode(Once again to get out calibration mode), Press the "light" button at this time, plus 0.05dB at one time, press the dB key to reduce 0.05dB at one time. The measurement error can be calibrated in this way. After the adjustment, press the power button to save the calibration data.

2.Press "zero" + "AUTO" buttons at the same time to restore the factory settings.

Measurement of relative power and absolute power

#### 1. Absolute power

Setting the test wavelength and accessing the photometric signal, the current values displayed on the screen include linear values and absolute values of absolute optical power.

#### 2. Relative power

The test wavelength is set, and the reference light signal is received in absolute optical power mode, and the optical power value is measured; Press the dB key at this point, and the relative

power value is displayed at the moment. Then, the metering signal is connected, and the absolute power value and the relative power value of the current metering signal are displayed.

#### Standard configuration

Optical power meter mainframe、Optical power meter with 650nm laser、Lightwave multimeter、Certificate、Operation Instructions、Warranty card、Three section 5 battery/Rechargeable lithium battery (optional)、Oxford roolls (optional)、General purpose universal joint (FC, SC, ST)、Packing carton.

#### Note:

Charging lithium battery charging voltage is 5V, you can charge it with your mobile phone charger.

#### Solutions to common faults

Trouble shooting	Possible causes	Terms of settlement
LCD faint display	Insufficient capacity	Replace batteries
Unable to display on boot	Insufficient capacity or others	Restart or replace the battery
LCD abnormal display	Joint fault, dirty or locked	Reconnect the connector and clean the sensor

#### daily maintenance:

1. Please keep the sensor face clean, do no oil, no pollution, no clean and do not use non-standard adapter connector, do not insert end polishing surface difference, otherwise it will damage the end face of the sensor, the test error.
2. Use one kind of adapter as much as possible.
3. Once the H-OPM is not in use, cover the dust cap immediately to protect the end surface from cleaning and prevent the measurement error from being exposed to dust for a long time。
4. Carefully plug optical adapter connector to avoid port scratches.
5. Periodically clean the sensor surface. When cleaning the sensor surface, wipe gently in the circumferential direction with a special cleaning swab.