

Calibration Function

Press the "LED"+ "LIGHT" key simultaneously, then enter the user calibration mode, the upper left corner of the screen shows the calibration icon "CAL".

| Function | Key | Remarks |
|--------------------------|---------------------------------------|---------------------------------------|
| Increase 0.05dB | LIGHT | |
| Reduce 0.05dB | dB | |
| Store | ⊖ | |
| Switch wavelength | λ | |
| Restore factory settings | Simultaneously press "LED"+ "REP" key | Success of full screen display prompt |

Daily Maintenance

1. Keep the end face of the sensor clean, grease-free, pollution-free, do not use unclean and non-standard adapter connectors, do not insert poor polished end face, otherwise it will damage the end face of the sensor and make the test error.
2. Stick to using an adapter whenever possible.
3. Once the optical power meter is not in use, cover the dust cap immediately to protect the end surface from cleaning, and prevent dust from attaching to the air for a long time to cause measurement errors.
4. Carefully plug and pull the optical adapter connector to avoid scratches on the port.
5. Clean sensor surface regularly. When cleaning sensor surface, please use special cleaning cotton swab to wipe gently in the circumference direction.

Common Troubleshooting Solutions

| Fault hint | Possible reasons | Settlement |
|-------------------------------|------------------------------------|--------------------------------------|
| LCD display is weak | Insufficient power supply | Replace Battery |
| Boot-up cannot be displayed | Insufficient power supply or other | Reboot or replace batteries |
| Abnormal optical power values | Joint failure, dirty | Reconnect Connector and Clean Sensor |

Warranty Ordinance

Respected customers:
Thank you for buying our products. In order to protect your legitimate rights and interests and improve the after-sales service to customers, this warranty regulation is specially formulated. Please read it carefully and welcome your valuable comments and suggestions.

1. The product is guaranteed free of charge for 18 months from the date of purchase, and if it exceeds the warranty period, it will be considered as a failure and charged zero attachment cost.
 2. During the free warranty period, the company has the right to refuse the warranty service and charge the original maintenance fee and service fee as appropriate.
- A: User's improper use or incorrect operation results in product failure.
B: Burning accident caused by lightning strike or improper installation;
C: Label damage or unauthorized disassembly of equipment for maintenance;
3. Please pack and deliver the repaired products properly. If there is any damage or loss in the process of delivery, the company will not be responsible for it.
 4. Please read the product instructions carefully before installing and testing our products.
 5. The warranty card must be sealed and dated by the seller to ensure your rights and interests.

Certificate
of Quality

QC: 011

Mini-OPM Series Instructions

Summary

Hand-held optical power meter, red-light integrated machine series products are mainly used for continuous optical signal power measurement, optical fiber link loss testing and optical fiber line on-off testing. It is controlled by a single chip microprocessor with complete functions. Widely used in optical cable construction and maintenance, optical fiber communication, optical cable sensing, optical CATV and other fields.

The fuselage design meets the requirements of human body function and adopts advanced thermoplastic moulding technology, which is beautiful and durable. The red-light integrator of optical power meter can be well protected by using embedded detectors and lasers. The machine has compact shape, automatic shutdown function, three red light modes, backlight display, wavelength memory function, optical fiber work identification, support user calibration, wide test range, support lighting.

Note: If there is any change in the version of the manual, no further notice will be given.

Product characteristics

1. Support lighting and backlight switch
2. Support automatic shutdown
3. Supporting Wavelength Memory Function
4. Support frequency identification (optional)
5. Support user calibration
6. Supporting red constant and scintillation (optional)
7. Supporting SC/FC/ST Interface
8. Supporting external power supply such as charging treasure, computer, etc.
9. Supporting simultaneous linear (mW) and non-linear (dBm) display
10. Supporting RJ45 testing (optional)
11. Changing, work 72 hours (OPM Function)

Product key instructions

1. **⊖**
Short press can start the machine.
Auto-shutdown function is turned on by default (10 minutes). Auto-shutdown function can be turned on or off by pressing this button. The power icon on the upper left of the screen is turned on or off accordingly.
Long press this key, shut down.
2. **LIGHT**
1 > Backlight on/off: Short press to turn on the backlight function, then turn off the backlight.
2 > 650nm light source on/off: long press to the open red light -- then flicker at 1Hz -- then flicker at 2Hz -- then turn off the red light, and cycle in turn. When the red light is turned on, the first line of the screen displays 650 nm.
Warning! Do not look directly at the laser light, lest it cause damage to the eyes.
3. **dB**
By short pressing this key, the relative optical power test (insertion loss test) or absolute power test can be realized. After entering the relative power test mode, the insertion loss (dB) is displayed at the bottom of the screen, and the reference value is displayed at the second line of the screen. Open RJ45 test mode in 3 seconds, then display RJ45 in the third line, and then exit RJ45 test mode.
4. **REF**
Press this key to set the current optical power as a reference value and enter the relative optical power test (insertion loss test) mode. The second line of the display screen will display the set reference value, and the third line will display the relative power value (insertion loss dB).
5. **λ**
Eight different test wavelengths can be selected, 1310, 1550, 1490, 1625, 1650, 850, 1300 and 980, and the selected test wavelength is displayed on the upper screen.
6. **LED**
Turn on/off the lighting LED lamp, and turn on or off the lighting function by pressing short.

Technical Indicators

| OPM | | |
|-------------------------|---|--------------------|
| Wave Range | 800nm-1700nm | 800nm-1700nm |
| Connector | Universal FC/SC/ST | Universal FC/SC/ST |
| Detector Type | InGaAs | InGaAs |
| Power Range | -70dBm~+6dBm | -50dBm~+26dBm |
| Uncertainty | ±5% | |
| Calibration Wave | 850/900/1300/1310/1490/1550/1625/1650nm | |
| Display Resolution | Linear display: 0.1%, Logarithmic display: 0.01dBm | |
| VFL (Options) | | |
| Wave | 650nm±30nm | |
| Output Power | 2mW/10mW/20mW/30mW/50mW | |
| Mode | CW/1Hz/2Hz | |
| Connector | Universal FC/SC/ST | |
| Others | | |
| Power Supply | Two Batteries NO.7 700mAh Rechargeable Lithium Battery (Options) | |
| Automatic Shutdown Time | 10min | |
| Continuous Working Time | ≥72h (OPM Function) | |
| Operating Temperature | -10°C~+50°C | |
| Storage Temperature | -40°C~+70°C | |
| Relative Humidity | 0~95% Non Condensing | |
| Size | 112mm×66 mm×30mm | |
| Weight | 140g/150g | |

Note:

1. Wavelength range: specify a standard operating wavelength range from 800nm to 1700 nm, in which the OPM can work under the specified index.
2. Power Range: the range in which the max power can be measured according to the specified index.
3. Uncertainty: The error between the measured result of a certain optical power and the measured result of standard optical power.