

Optical power meter red light source integrated machine operation manual

Product overview

The hand-held fiber optic multimeter is a precise and durable portable instrument specially designed for the installation, operation and maintenance of fiber optic networks. It has exquisite shape, backlight display with optional switch and automatic shutdown function, ultra-wide optical power test range, accurate test precision. User self-calibration function and general interface design. Add red light source test function and network line test function, a unique design of memory wavelength parameters, lighting, standby state after 10 minutes automatically shutdown, while linear index (MW) and non-linear index (DBM) display the same screen.

Optical power meter



Technical Index of Red Light Source Integrated Machine for optical power meter

Power measurement range	-70 ~ +10dbm / -50 ~ +26dbm
Probe type	InGaAs
Wavelength range	850 ~ 1650nm
Standard Wavelength (NM)	850, 980, 1270, 1300, 1310, 1490, 1550, 1577, 1625, 1650
Display resolution	LINEAR DISPLAY: 0.1% logarithmic display: 0.01 dbm
Operating temperature	-10 ~ +60℃
Storage temperature	-25 ~ +70℃
Automatic shutdown time ( min )	Ten minutes
Output Power of red light source	>1mW >10mW >20mW >30mW >50mW
Output Wavelength of red source	650nm
Contour dimension (mm)	111×69×30
Power supply	Rechargeable lithium battery or 2 No. 7 Alkaline Batteries

Function description

- power/backlight button long press the button to turn on or off, Short press the button to turn on or off backlight.
  - REF Key short press key set the current power value to the relative power DB reference value.
  - SAVE keystroke short keystroke browse saved measurement records or quit browsing, can SAVE measurement data 500. Long press the SAVE button to SAVE the current measurement at the light work measurement interface. In the record browsing interface, long press the SAVE button to clear the record.
  - VFL/LED keypad short keypad switching red light source constant/strobe/off, default is constant light, blinking frequency is 2 Hz; long keypad switching on or off LED lighting.
  - dB key short press key, in the set wavelength and REF reference value, the relative measurement of optical power, again short press exit relative measurement. Long press key is to enter the network cable detection function, and then long press is to exit the RJ45 detection function..
  - Enter wavelength button short push button switch wavelength.
- Special Function
- the combination of key, power at the same time long press the key + enter the wavelength key 2 seconds, after starting calibration function interface, REF key to increase 0.1 dB, dB key to reduce 0.1 dB. Short press the power button to save and exit.
  - Special Keys, Ref keys for added function and DB keys for reduced function in calibration interface and record browsing interface.

Absolute optical power measurement

- Turn on the optical power meter.
  - Set the measurement wavelength, select the measurement wavelength through the key, the default setting is 1310nm.
  - Access the measured light, and the screen displays the current measured values, including absolute power of the linear, linear and nonlinear values.
- Relative optical power measurement

- Set The measuring wavelength.
- In the mode of absolute optical power measurement, the current power value is measured by connecting the measuring light.
- Press the DB key and the current optical power value becomes the current reference value (in DBM) .
- access another measurement light, display the current measurement light absolute optical power value and relative, optical power value.

Common Malfunctions

Fault manifestation	Possible cause	The solution
The LCD display is weak	Battery's low	Change batteries or recharge
Power on, no display	Insufficient battery/others	Replace battery/reboot/recharge
The LCD display data remains the same or changes slightly	Light adapter connector failure or dirt/display locked	Check if the connection of the light adapter is correct; clean the sensor end

Quality Assurance

We do not agree with the User self-repair smart handheld optical power meter.

- When the purchased product is found to have a quality problem during this period, our company will make the corresponding repair or replacement. But under no circumstances will our liability exceed the purchase price of the product.
- If the instrument in the use of the process of problems, according to common failure tips solution still can not be solved, users shall not open the case, please contact our marketing department or agents around the world.
- Our company is responsible for repairing or replacing the products free of charge for the quality failure caused by the production defects. This guarantee applies only to the normal use of the instrument, and no damage or improper use of the conditions.

The warranty does not cover problems/failures caused by :

- unauthorized repair or modification of the instrument .
- improper use, inadvertent use or accident, etc.

We have a warranty card with our products.

Please fill it out and

return it to us with a copy of the invoice so that we can maintain, update and calibrate your instrument, well, there's a root cause.

Appendix: fiber loss measurement

The first step set the reference (Reference) value

- Open the optical power meter and select the correct working wavelength through the A lambda key.
- Open the light source (the source), choose the right wavelength and stabilize it (the process takes about 1-2 minutes).
- Choose an optical fiber jumper to connect the light source. We call it the launch source jumper and clean the jumper.
- Connector. Note: the optical fiber used in the launch source jumper must be the same as the optical fiber used in the optical fiber link.
- The light source (source) is connected to the optical power meter using the source jumper. The value of the light power at this time is obtained.
- Note: the measured power value should be similar to the setting value of the light source (emission source) itself.
- Large deviation, pay attention to carefully clean each connection end or replace the launch source jumpers in time.
- According to the dB key of the optical power meter, the reading number of dB at this time is 0, and the optical power value is set at the same time.
- For reference (Reference) value
- Note: after returning to zero, the number of decimal places will change slightly. This is a normal

Second step optical fiber link loss measurement

- The connection between the launch source jumper and the light source (source) is maintained.
- The light source (transmitter) is connected to the optical link separately and needed.
- Note: clean all connections, including the required optical fiber adapters.
- The reading shown at that time is the loss of the measured optical fiber link. The unit is dB (at the same time, it is displayed in dBm mode).
- The absolute value of the absolute optical power of the front.

Standard configuration

Configuration description	
Fiber Optic multimeter I	Product Manual
Optional battery or self-charging Lithium Battery	LANYARDd
Charging wire (type selection)	Certificate of conformity

配置描述	
光纤多用表1台	产品使用手册
选配电池或自带充电锂电池	挂绳
充电线（机型选配）	合格证