

ence power. The "REF" icon is displayed on the first line of the screen for about 1 second.

Threshold selection:

Provide 10 groups of threshold selection, long press THR to enter threshold setting mode, short press THR to switch threshold group, long press THR again to exit threshold setting mode.

User calibration mode:

At the same time, press REF&THR to enter calibration mode, short press SEL to switch the wavelength, short press ▲ or ▼ to adjust the power value in 0.1dBm steps, press ⏻ to save and exit. Press REF&THR to exit without saving. Press ▲&THR to recover default value.

Technical indicators

10G Wavelength Division Optical Power Meter					
Model	Three wavelength			Two wavelength	
Wavelength	1490±10nm	1550±10nm	1577±10nm	1490±10nm	1577±10nm
Isolation1490nm	--	>40dB	>40dB	--	>25dB
Isolation 1550nm	>40dB	--	>40dB	--	--
Isolation 1577nm	>40dB	>40dB	--	>25dB	--
Dynamic Range (dBm)	-40~+10	-40~+25	-40~+25	-50~+26	-50~+26
Uncertainty (dB)	≤±0.5				
Display Resolution(dB)	0.1				
Probe Type	InGaAs				
Threshold Group	10 Group				
Data Storage	10 Strip				
Insertion Loss (dB)	≤1.5			--	
Fiber Type(um)	SM9/125			--	
Optical Connector	SC(Interchangeable FC)		FC/SC/ST Universal Joint		
VFL(Optional)					
Wavelength	650nm±20nm				
Output Power	≥10mW				
Mode	CW/1Hz/2Hz				
Optical Connector	Universal Joint FC/SC/ST				
Others					
Screen	Color break code screen				
Data Interface	Micro USB				
Power Supply	3 AA batteries/Rechargeable version: Lithium polymer battery : 3.7V, 2400mAh				
Operating Temperature	-10°C~+50°C				
Storage Temperature	-40°C~+70°C				
Relative Humidity	0 ~ 95% No condensation				
Size	186mm×100mm×50mm				
Weight	240g				

Standard configuration

Host, instruction manual, data cable, 2 sets of FC head + casing (Three wavelength), certificate of conformity/after-sales service warranty card, Instrument special bag, 3 AA batteries(select dry batteries), lithium batteries (select lithium batteries), data cable (select lithium batteries)

Common faults

Fault phenomenon	Possible causes	Solution
No LCD display	The power is not on	Press ⏻ to turn on
Unable to power on	The battery is low	Replace the battery
Power on and power off automatically	The battery is low	Replace the battery
	Automatic shutdown is set	Check auto shutdown settings
Measurement error or instability	The joint is not clean	Clean the connector
	Improper fiber connection	Reconnect the fiber

Warranty regulations

Thanks for purchasing our products. In order to protect your legitimate rights and interests, and to improve the after-sales service, this warranty regulation is formulated. Please read it carefully.

1. 18 months free warranty for this product since the date of purchase, if it exceeds the warranty period, we will charge accessories.

2. During the free warranty period, we have the right to refuse the warranty service and collect the maintenance fee, if:

A: User improper or erroneous operation leads to product failure.

B: Accidents caused by lightning or improper installation;

C: Label is damaged or unauthorized to disassemble the equipment for maintenance.

3. Products under repair are properly packed and shipped. The company is not responsible for any damage or loss in the delivery process.

4. Please read the product instruction carefully before using the product.

5. The warranty card must be stamped and dated to ensure your rights.



10G Wavelength Division Optical Power Meter Instructions



Summary

This series OPM with separated wavelengths are mainly used for the installation, test and maintenance of FTTH Optical Access Network. When there are multiple wavelengths of optical signals in an optical fiber, the traditional power meter can not identify the wavelength, and can not give the corresponding power of each wavelength. Different from the traditional optical power meter, this series can identify the wavelength and give the power value of each wavelength in the fiber at the same time. It is mainly used for the power measurement of the downlink signal 1490nm, 1577nm and 1550nm in 10GEPON/XGPON and RF network, so that the installation and maintenance personnel can truly grasp the power value of the single wavelength optical signal and accurately judge whether the optical power value meets the standard.

Note:The version of the manual is subject to change without prior notice.

Features

- ◆ Measurement of power of divided wave laser
- ◆ Support EPON / 10G EPON/XGPON downlink wavelength power measurement
- ◆ Support the simultaneous display of linear mW and nonlinear index dBm
- ◆ Support RF 1550nm wave power measurement
- ◆ Support automatic shutdown
- ◆ Support FC/SC/ST interfaces
- ◆ Support USB power supply and charging for power bank and computer
- ◆ Working time is higher than 72 hours

Function description

Keys and ports description

1. ONT:1310nm detection port
2. OLT:1490/1550/1577nm detection port
3. VFL: 650nm red light source
- 4.USB: mobile power supply available, non charging
5. Display
6. ON/OFF&Auto shutdown key

7. REF: set reference power
8. THR: set the threshold **Three wavelength**
9. ▼/Load: save or view the saved results
10. ▲/Unit: switch display unit dBm/dB/mW
11. SEL: in threshold set mode, switch the lower limit of threshold and the lower limit of alarm in threshold group; In the view interface, switch to saved items

Two wavelength

Instructions

(1) Power on: Press the power button and release it to power on. Press and hold the key when starting the machine, and then press the SEL key briefly to switch the automatic shutdown time setting (10/30/60min).

(2) Shut down: press the power button when the machine is on to shut down. The PON power meter can simultaneously measure the output power of 1490nm/1577nm downlink data signals and 1550nm video signals in the PON network.

After startup, enter the PON test interface. The measured power values of the three signals are displayed on the screen at the same time. If "LOW" is displayed, the input optical signal intensity is too low. The limit parameters of each wavelength refer to the technical indicators of the equipment.

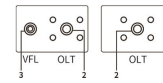
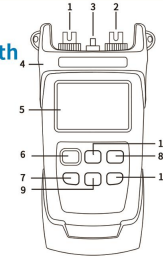
Threshold setting:

long press THR to enter threshold setting mode. In the threshold setting mode:

short press THR to switch the threshold group, short press SEL to switch the three threshold lower limits and three alarm lower limits in the current threshold group, short press ▲/UNIT and ▼/LOAD to adjust the threshold in 1dBm steps, long press again to exit.

Reference power setting: press the REF key briefly to set the current power value as the reference power and enter the reference power display mode. Press and hold the REF key to display the current REF value, and press and hold again to return.

Switching unit: short press/UNIT to switch display unit dBm/dB/mW.



Test:

clean the optical connector to be tested, connect to the OLT interface (FC/SC/ST connector) of the instrument. Pay attention to the type of the optical connector to be tested. If the mismatched connector is connected, the output connector of the instrument may be damaged, and incorrect measurement results may be obtained. For example, the threshold name is THR1, and the set values in the group are as follows:

	OLT:1490nm		VIDEO:1550nm		OLT-10G:1577nm	
THR name	Warning: ▲	X: FAIL	Warning: ▲	X: FAIL	Warning: ▲	X: FAIL
THR1	-20dBm	-30dBm	-20dBm	-30dBm	-20dBm	-30dBm

The instrument test results show that:

- 1) The intensity of 1490nm uplink test optical path is -10dBm, greater than -20dBm, indicating that the link is normal, so the green icon ✓ is displayed;
- 2) If the test optical path intensity is between -20 and -30dBm, it indicates that the link may have problems but can be used, and the yellow icon ▲ is displayed ;
- 3) If the test optical path intensity is not within the threshold range, such as < -30dBm, it means abnormal, and the red icon X is displayed;
- 4) If the test light path intensity is more than +10dBm, the power value is displayed as HI, indicating that the light path is normal.

1550nm and 1577nm are the same as 1490nm.

The test is over. Keep the instrument interface clean and put on the dust cap immediately after shutdown.

Save and view:

In the test interface, long press ▼/LOAD to save the current value, and the screen will appear in the middle of the first line icon about 1 second, save successfully.

Short press ▼/LOAD to enter view mode, press SEL to cycle to switch the current group, long press UNIT and THR at the same time to delete the current group.

Relative value measurement of PON power meter

According to the test requirements, choose to display different wavelengths and reference values, the relative power value = absolute power value - reference value. Briefly press REF to set the current power as the refer