

1. Functions and Features

- Optic power test
- Wave ID—Auto wavelength identification & switching
- Frequency ID ---Auto frequency identification
- 1000 records storage or download via USB cable
- USB communication port for saved testing records download
- Reference power level can be set up and stored
- User self-calibrating function
- Auto-off function

2. Specifications

Calibration Wavelength (nm)	850/1300/1310/1490/1550/1625	
Detector type	InGaAs	
Measurement Range (dBm)	-70 ~+3	-50 ~+26
Uncertainty (dB)	±0.15 (3.5%)	
linearity (dB)	±0.02	
Display resolution(dB)	0.01	
Frequency ID (Hz)	270, 1K, 2K	
Date Storage Capacity	1000	
Communication Port	USB	
Standard Connector	FC /2.5mm universal	
Alkaline battery	3*AA, 1.5V	
Power Adapter(V)	8.4	
Battery Operating time (h)	200 without backlight	
Operation Temperature(°C)	-10 ~+60	
Storage Temperature(°C)	-25 ~+70	
Dimension(mm)	200*90*50	
Weight(g)	285	

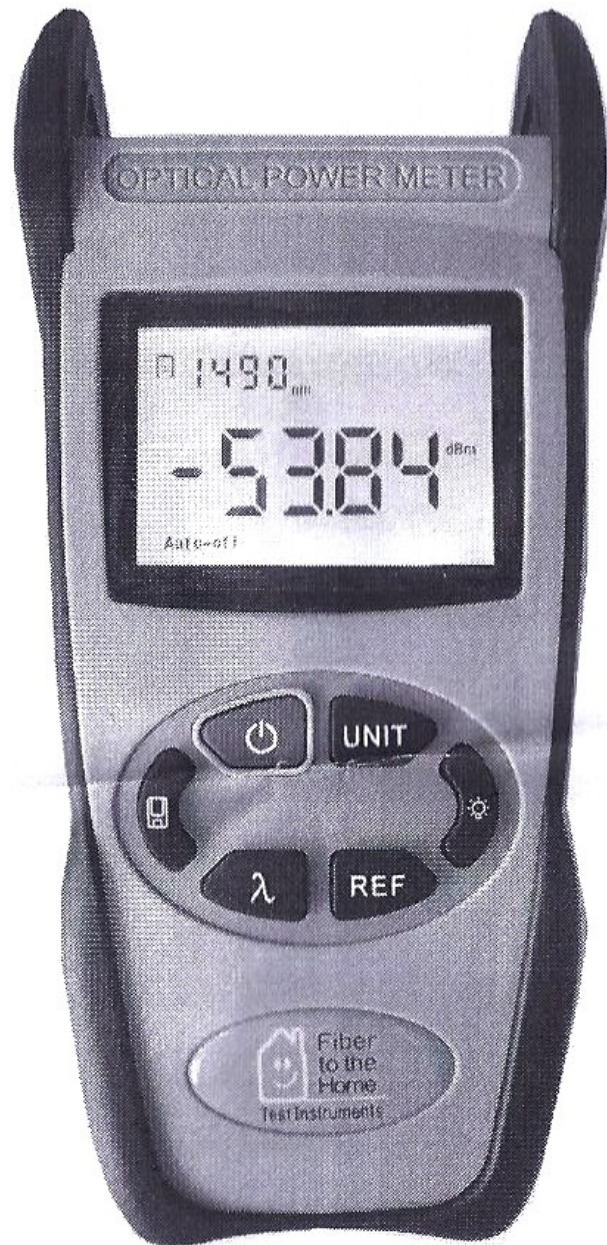
Remark: Battery operating time is based on the condition of the power off the backlight. If power on the backlight continuously, the operation time will be shorter.

3. Standard configuration

No.	name	qty
1	Optical Power Meter	1
2	User Manual	1
3	USB cable	1
4	CD	1
5	1.5V AA battery	3
6	Power Supply Unit	1
7	Cotton Swabs	1
8	Carry Bag	1

4: Function

4.1 Front of the OPM



4.2 Manual of the function

(1) Screen

Display the data and the instrument working mode.

(2) Power Key

ON/OFF the instrument

Power Saving setting: the unit will automatically shut off after 15 minutes idle time, whatever in the condition of battery power supply or AC power supply. Once choose this setting, the "auto-off" will display on the left bottom of the screen. This power saving is the default setting, once open the power meter, will enter into this mode. Short press the power key to off auto power saving mode.



(3) unit switch key

Press this key to switch between the absolute measurement(dBm) and relative measurement(dB) and xW of the optical power.
mW、dBm conversion: $10 \log(\text{mW})=(\text{dBm})$

(4)  REF setting:

To store the current power value as the reference value which will be displayed on the top right of the LCD screen, at the same time the "Ref" also display on the right top. It will compare the current power with the reference power and show the relative power value in dB.

(5)  Saving/data-view key.

Data-saving, HS1001A can saving not less than 1000 data. Press , the screen will display the data saving No, tip saving the data, double press the  confirm the saving.


(6)  backlight control: Open or turn off the backlight.


(7)  Wavelength Selection/Wavelength identify


Short press this key to switch the wavelength and display it on the top left of the LCD screen, 1310nm is the default wavelength

5 . Operation Instruction

5.1 Turn ON/OFF

First of all insert the battery or the PSU, do not have any laser in, press  to open the tester.


When the tester is standby, press  key can cancel or choose auto-off function. If auto-off function are chosen, the "Auto-off" will display on the left bottom of the screen. On the "Auto-off" status, the OPM will turn off 10 minutes automatically.


If you want to turn off the OPM, press  about 2 seconds.


5.2 Output power measurement



5.2.1 Take off the dust cap, connect with the patch cord. Please confirm the connector and the ferrule of the patch cords is cleaning.


5.2.2 Turn on the OPM.


5.2.3 Select the wavelength. Short press , select the calibrated wavelength, notice that the selected wavelength must be the same with the laser source wavelength.

5.2.3 Unit switch. Press  to switch between the absolute measurement(dBm) and relative measurement(dB) and xW of the optical power.

5.2.4 Relative value measurement. Each wavelength can set the Ref value, Press , set the current value as the ref value, and automatically calculate out the relative value.

5.3 Data processing. This type OPM has 1000 data saving memory. When need save, press  button, at the right top of the screen will display the data saving Number. Then repress  button, confirm saving, the saving No. will disappear at the right top of the screen. How to transfer the data to PC and view or delete the data please refer to the CD.

5.4 Wavelength Automatic Identification. Press the button  of the OPM till appear "--AU " at the right top of the screen; Press

the  button of the OLS, and then can release this function.

5.5 Frequency detection. HS1001A can test the frequency of the HS2001A. If HS2001A output frequencies of 270Hz, 1KHz, 2KHz accordingly, HS1001A will detect the frequency and show it on the upper right of the LCD automatically.

5.6 User-self Calibration.

Please refer to CD.

6 . General Maintenance

6.1 Always keep the connector ports of your power meter are clean.

6.2 Do not use bad quality optical fiber connectors/adaptors, otherwise, it will damage the interface of detector that will greatly affect the performance of the unit.


6.3 Try to use only the adaptor supplied.

6.4 Once not in use, make sure dust-proof cap is placed properly over the optical ports.

6.5 Carefully plug in/out for fiber connectors/adaptors to avoid scratches on the port of the power meter.

6.6 Keep regular cleanings on optical port of power meter, please clean with cotton swabs supplied using alcohol properly.

7 . Troubleshooting

Problems	Possible cause	Solution
Faint display on the LCD screen	1. Power is off 2. The battery power is too low	1. Press  key. 2. Change the batteries
Inaccurate measurements	1. Optical connector is not clean. 2. incorrect fiber connection	1. Clean optical connectors 2. Re-connect the fiber

8.Change Battery

If you find battery is weak while operating it, please immediately turn the unit off and change a new battery.