

BD-PON-J310G

XGPON/10GEPON Power Meter

User Manual

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Product Introduction

XGPON/10GEPON power meter is a new tester for FTTX network. It has all the functions of traditional PON tester. Besides, it also has the function of the next generation PON testers. JW3239 could judge whether the power value is suitable or not by self-setting the threshold. It is an ideal tester for PON network and maintenance.

Technical Specifications

G/E PON Module			
Wavelength	Wavelength	Wavelength	Wavelength
Range (dBm)	Range (dBm)	Range (dBm)	Range (dBm)
Spectral band passes	Spectral band pass	Spectral band pass	Spectral band pass
Isolation	Isolation	Isolation	Isolation
XGPON /10GEPON Module			
Wavelength	1270nm	1577nm	
Range (dBm)	+10~-40	+10~-40	
Spectral band pass	1270±20	1577±20	
Isolation	1577nm>40dB	1270nm>40dB	
Other			
In penetration mode IL (dB)	≤1.5dB		
Uncertainty	≤0.5dB		
Resolution	0.01dB		
Threshold setting	10		
Data storage	1000pcs		
Working temperature	-10℃~+60℃		
Relative humidity	0%~95%RH		
Connector type	SC/APC (FC/APC optional)		
Communication port	USB		
Power supply	3pcs AA1.5V battery		

Working time	Working time≥20H, standby time≥60H
Size	L*W*H 192mm×102mm×50mm
Weight	420g

Function Description

Appearance



1- OLT/Video Downstream detector (1490nm/1550nm/1577 nm)
2- ONT Upstream detector (1310nm/1270nm)
3- Screen
4- Turn on/off
5- Cursor selection
6- Function selection
7- Menu/ Unit
8- Relative value
9-Cursor selection
10-Confirm key
11-Setting key
12-Menu/ Wavelength
13-USB Communication port

Operation Instruction

Power ON/OFF

Power ON

1. You should confirm the appearance of the product.Ensure the correct installation of the battery.
- 2.Press the  key until the screen is light,The backlight of product will be dim if there is no operation in 60 seconds.(You can set the brightness by yourself in Menu) If there is no button operation for more than the set time, the meter will automatically turn off.

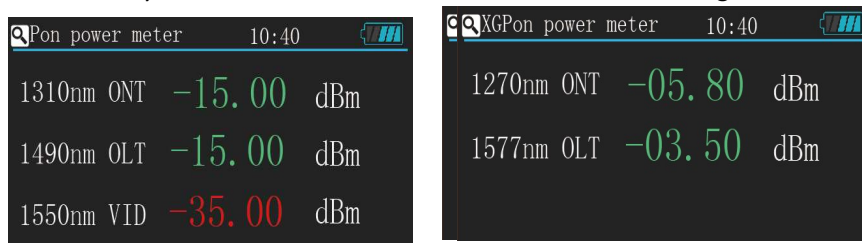
Power OFF

- 1.Press  key for about two seconds, to turn off the unit.
- 2.When the set time of auto-off is not 0 second,the product will be auto off if there is no operation in the set time. You can press the  key to turn off the function, and the icon will become gray.

3.4.2 PON Power Meter Test

4.4.2.1 Interface of PON Network Power

5.This is PON power meter module. You can see the interface through press “Function selection keys” or “Menu” back to the interface. As shown in figure 4.2.1



4.2.1

4.2.2 Instructions for Normal Optical Power Meter Function

After open the instrument, switch to the Normal optical power Meter Module. Clean the tested optic cable, connect with instrument. The optical adaptor will be break, and the tested value will be faulty if the un-matched adaptor connected

If the power within the measuring ranger of instrument, the screen can show the correct measurements. If you want to save the data ,Please press “Confirm” key



4.2.2

In this interface, you can update reference value through press “Ref” key, and the reference value will be displayed on the screen. The unit of reference value is “dB”.

If you want to view reference value records press “Up” key until you can see the “reference value”;

Edit PON Threshold

In the interface of threshold selection , You can set the threshold group , the name and the threshold parameter corresponding to the channel

In this interface, press the direction keys to set the selected object, press the “Enter” key to enter edit mode, it can be edited by direction keys, press “Enter” key to save. As shown in Figure 4.3.1



4.3.1

Press "Menu" key to back after finish edit. Pop-up dialog

If you do not need to save, you can directly press the return menu item to exit to the main menu. As shown in figure 4.3.2



Record

History data record to delete and view datum function.press direction keys to choose different function and press "Enter" key to execute the function.

without any operation after enter the interface, the upper right corner of the display is always the number of the last record, it also means the used RAM.As shown in Figure4.4



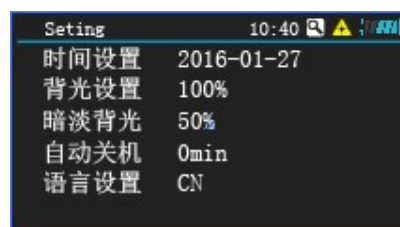
Settings

The Interface of instrument setting can set "the instrument time", "the backlight brightness" "waiting time of auto-off instrument", "language setting".

The instrument supports 3 kinds of language, Chinese, English and Spanish.

In this interface you can press direction key to select, and press "Enter" key to enter edit mode,

As shown in figure .



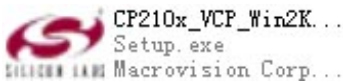
Connection and Information

Connection and information interface include "ROM Version" "Release Time"" Capacity""Connection" You need switch to this interface when connecting the test software ,The "Connection" shows "YES" represent connection successfully



Test software instruction

Run the CD, install USB driver software CP210x_VCP_Win2K_XP_S2K3.exe.



Install the software dotNetFx40_Full_x86_x64.exe.

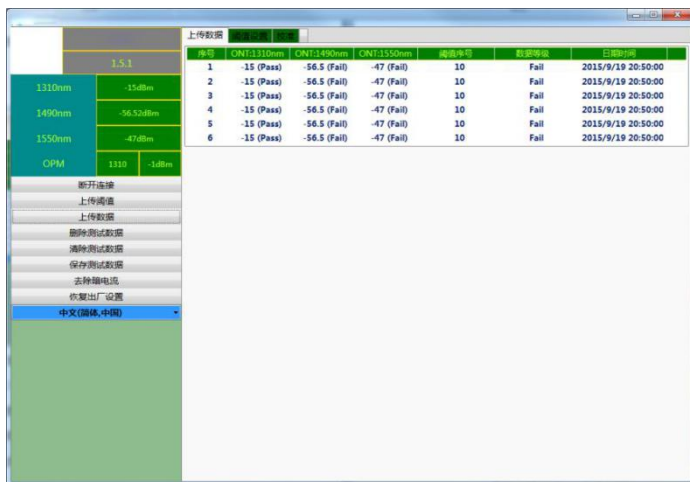


Connect PON power meter to the computer's port using the provided USB cable, Open the software.



Upload the data (Note: customer software and instrument cannot be operated at the same time)

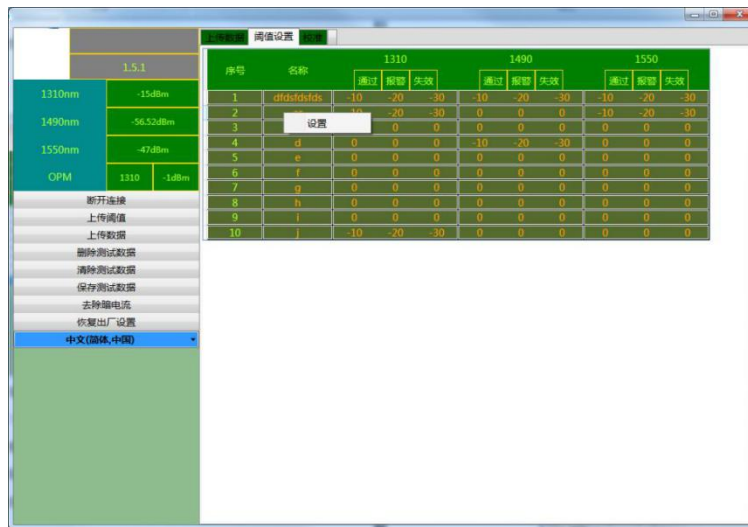
- (1) Open the PON power meter, first of all click “connect”, connect PON power meter to the computer(Click“English”to set the language of the operation interface to be English)
- (2) choose “Upload Data”, click “Upload Test Data”sign, the saved data can be read on the computer, and saved as a file format.
- (3) click the“Delete Test Data” button or“Clear Test Data”to delete the data. See figure 5.1



5.1

Click “Upload threshold value” icon to read the threshold.

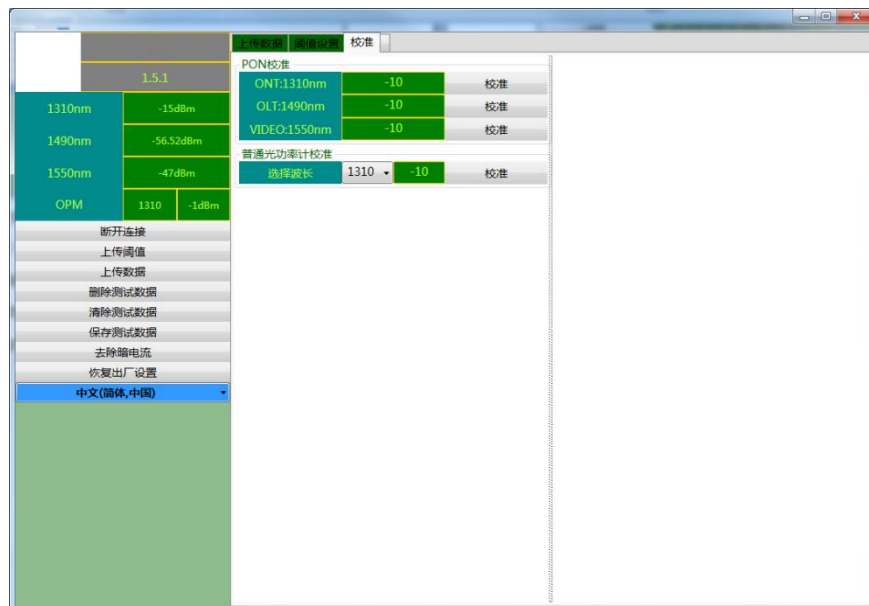
From the toolbar, select “Threshold Set”, and right click the Threshold to type or modify the threshold value. See figure 5.2



5.2

Calibration

Choose "Calibration" tab, the user can perform user self-calibration operation also can choose "Factory Reset" mode. For example, the current optical power at 1310nm is -10dBm, type -10dBm in the text box of input standard power, and click Calibration tab, then finished the calibration operation at 1310nm wavelength. See figure 5.3



5.3

Maintenance

- 1 .The tester should work without obvious vibration.
2. Always keep clean fiber-optic connectors before using, keep the unit free from oil and dust.If there is dirt, unscrew the adapter and use wipes or paper and anhydrous alcohol to clean the end face.

3. After finish the testing or when the unit is unused, please cover the dust-proof cap to ensure the optical interface is clean and to avoid measurements errors caused by dust.
4. Push/pull the fiber-optic connectors carefully to avoid the scratches on the interface.
5. Handle with care to prevent equipment from falling and collision。

Troubleshooting

Problem	Possible cause	Solution
No display on the LCD or unable to power on the tester	Power Off Lower Battery	Press“  ” to turn on Change the battery
Auto power off after power on	Lower Battery Automatic shutdown is set	Change the battery Check product automatic shutdown Settings
Inaccurate measurements or unstable	Optical interface is not clean Improper fiber connection	Clean the fiber optic interface Reconnect the fiber

Quality Insurance

Caution: Repair it in the field is NOT recommended.

1) We warrants that **PON Optical Power Meter** will be free from defects in material and workmanship for a period of **18 months**. The date will be started from the date of goods receiving by original customer.

2)This warranty is limited to defects in workmanship and materials and does not cover damages from accident, acts of god, neglect, wrong usage or abnormal conditions of operation.

3)We will charge corresponding fees for the cost of materials, repair and shipping in conditions of below:

Defects occurred under normal use and service but out of the warranty period.

Failures and damages occurred do not because of defects in material and workmanship of products.

Failures and damages occurred because of failing to comply with the Operation Instruction and necessary attention.

abnormal conditions of operation or handling:

Such as artificial damage, or operating in abnormal conditions of like high temperature 、

high voltage, humidity and etc., we will charge depend on the actual failure rating.

Order Information: XGPON/10GE PON Power Meter