

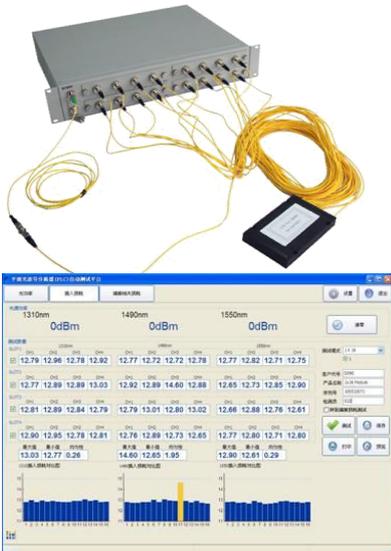
GJ600

Multichannel Passive Device Tester

User Mannul

1. Introduce

GJ600



Description

:

GJ600 Multichannel Passive Device Tester is used to evaluate the insertion loss of Multichannel Passive Device, it's a reliable instrument which integrated with DFB light source, optical power meter and IL meter, as a light source it could output 1310nm, 1490nm and 1550nm stable light source: as a optical power meter it could measure power value of 850nm, 1300nm, 1310nm, 1490nm, 150nm and 1625nm wavelength: as a IL meter it could measure IL of passive device with 1310nm 1490nm and 1550nm wavelength, especially AWG splitter, 1*N passive optical device and etc.

Feature :

- suitable for the test of optical passive device like AWG and 1*N splitter and etc.
- Extremely high testing rate
- High accuracy of IL measurement
- Flexible module design

2. Specification:

Optical power meter	
Testing wavelength	850nm、1300nm、1310nm、1490nm、1550nm、1625nm
Testing range	-60dBm ~ 10dBm
Accuracy	-60dBm ~ 10dBm : $\pm 0.35\text{dB}$
Resolution	0.01
Light source	
wavelength	1310nm、1490nm、1550nm
Power	$\approx -5\text{dBm}$
Stability	0.05dB/15 分钟
PDL/IL index	
PDLrange	0 ~ 5 dB
ILrange	60 dB
Resolution	0.01
Other index	
Power supply	AC100 ~ 240V 50/60Hz 1A
USB	Capable
Working Temp	0 ~ +40°C
Storage Temp	-20 ~ +70°C

3. Structure :



Num	Description
1	Multi-wavelength laser source port(FC/APC)
2	VFL port
3	Testing submodule
4	Power testing submodule
5	Screw of submodule
6	USB interface
7	Power supply
8	



The left two ports is light source and VFL.

The upper port which printed “output”is light source (1310nm、1490nm、 1550nm) connector type FC/APC, power is about -5dBm

The under port which printed “VFL”is visual fault locator port,connector type FC/PC ,power is about 1mW.

Power indicator is between two ports.



Front panel have 4 power measuring modules“SLOT1、 SLOTT2、 SLOTT3、 SLOTT4”,each module has 4 measuring channels“CH1、 CH2、 CH3、 CH4”.

4.0 software

GJ600 contains professional software

4.1 Introduce

Attached CD contain manual,software and drive.

4.2 Drive installation

User can find device drive “USBDriver.exe”in root directory,please install this software the fist time use GJ600.

Procedures showed as follow:

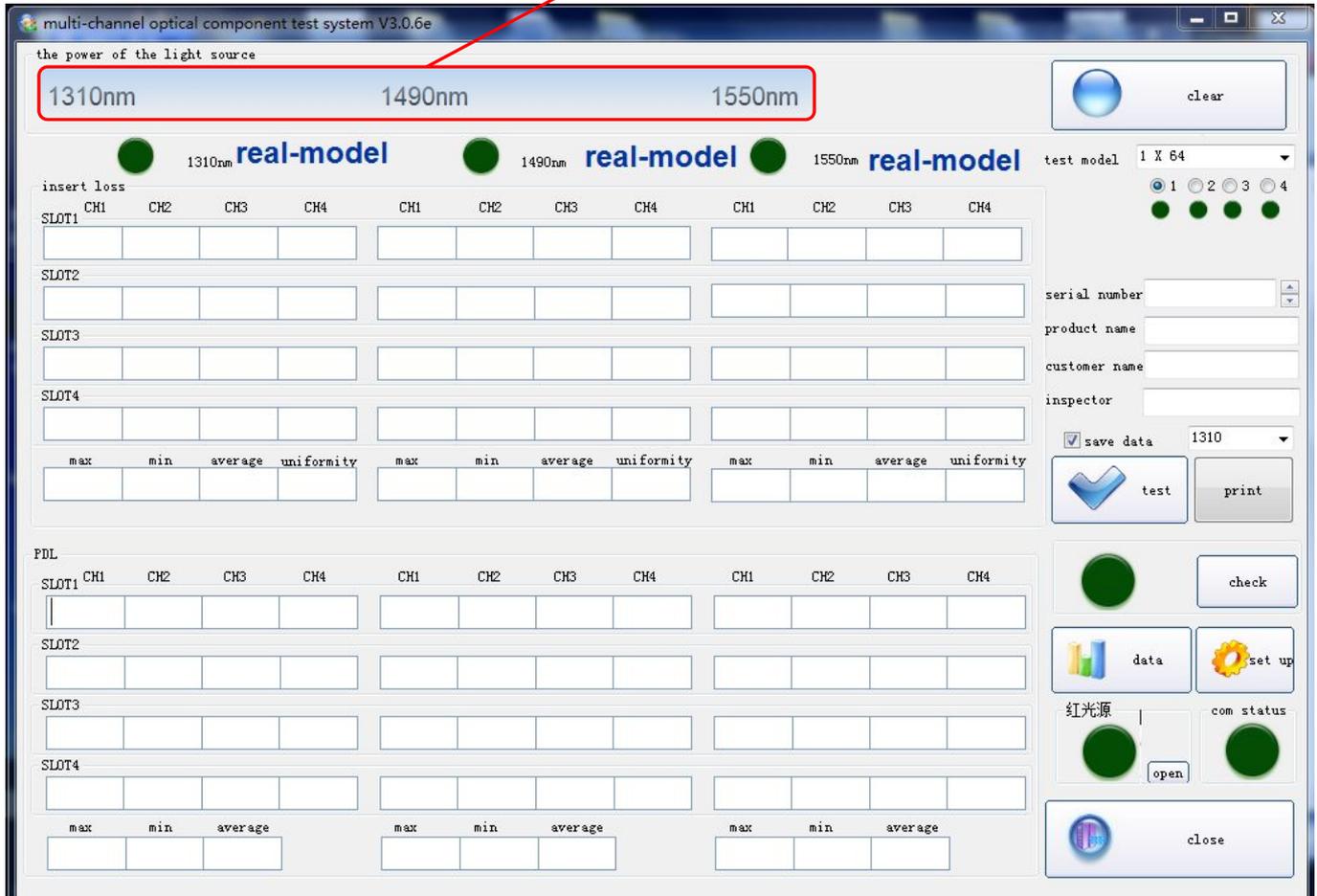


Double click USBDriver.exe icon, finish the installation.

4.3 Multi-channel optical component test system

4.3.1 Test Interface

State indicator



Testing interface displayed after open software

Gj600 could proceed 16 channels IL and PDL test,

State indicator could indicate the connection state of PC and device.

Under this interface, user could turn on/off the VFL.

Procedures:

- 1) Connect patchcord with laser source (FC/APC) and CH1 SLOT1, press zeroing button, software will record the power value of laser source as the reference value of IL test.
- 2) Remove patchcord from CH1 channel, connect to the input port of a passive device through mating flange, then connect the output of passive device to the test channels.
- 3) After the connection 1550nm realtime mode will display the IL of input, operator could check whether the value is normal.
- 4) Connect each output end to each port of modules, press test button to start test.

Software can switch wavelength automatically and change the polarization state of laser through PDL controller during the test. Software will record the power value according to the time, calculate IL and PDL value

Software could display Max value, Min value and uniformity of 16 channels

User could check saved data in database

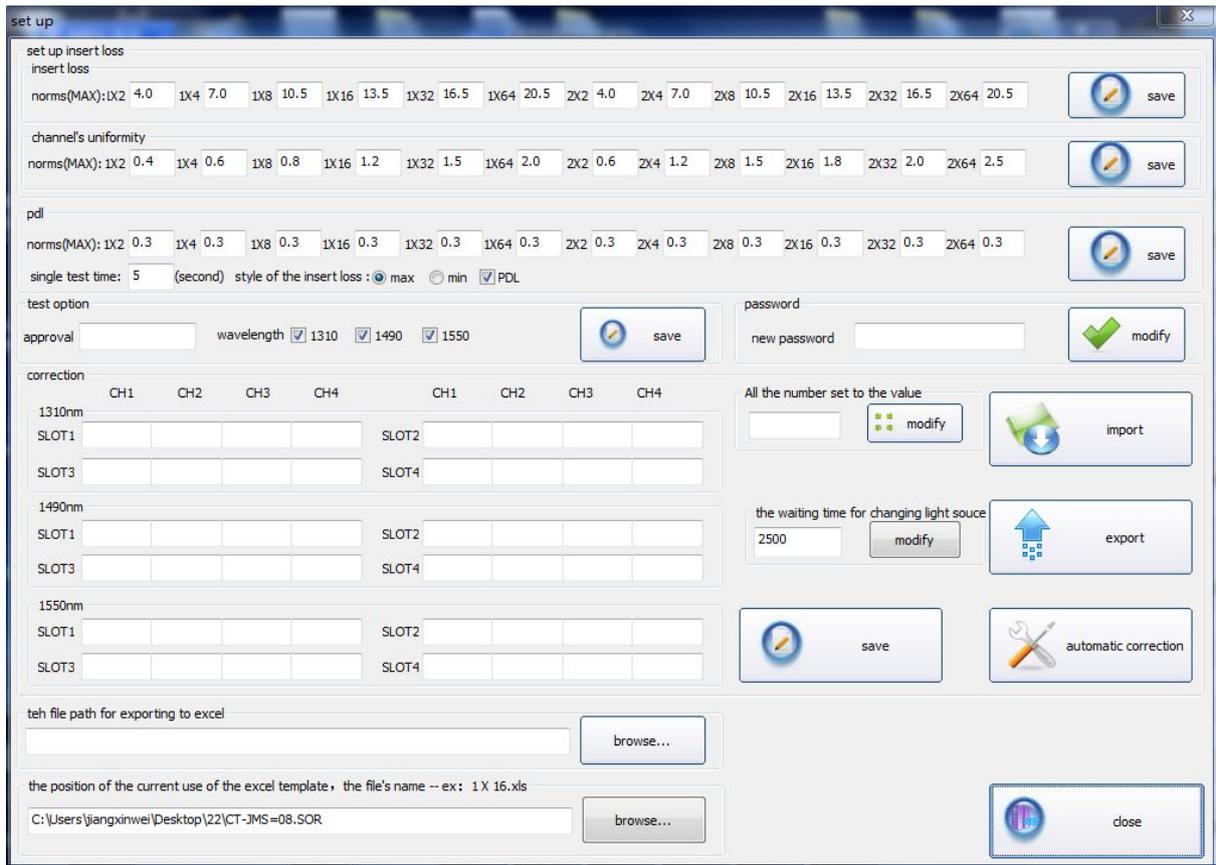
Set series number before test, software will save data as the number of series you have set

User should choose 1x16、1x32、1x64、2x16、2x32、2x64 test mode, software will combine the data which has same serie number into one report sheet.

4.3.2 Setting Interface

Input password “111111” to start setting.





User could set parameters in this interface:

Modify password

Set threshold value of IL,PDL and uniformity of channels

Set test time of PDL and single test

Set wavelength of PDL and light source

Set saving path of data

Set correction value of each channel

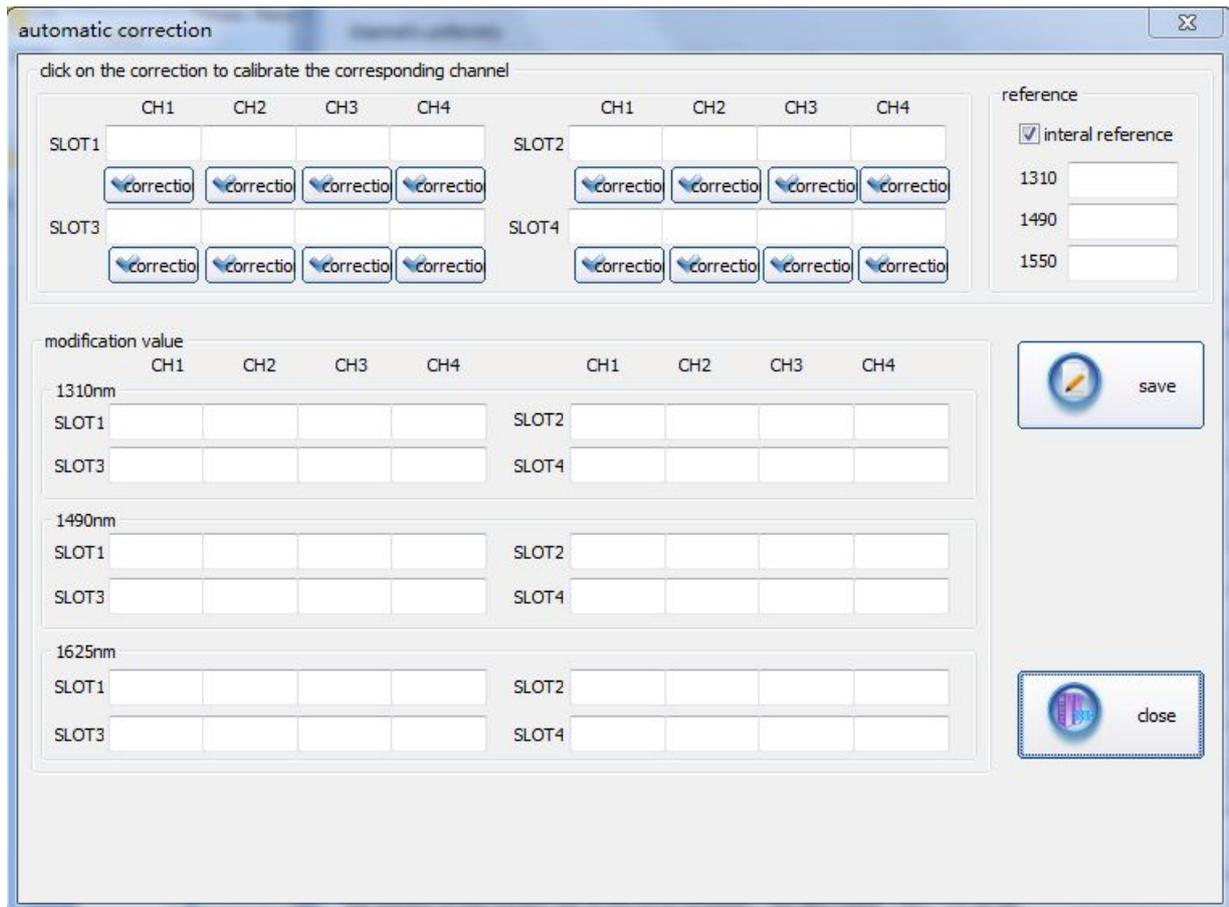
Export and import correctiodaon value.

Press autocorrection button to enter autocorrection interface.

Set saving path of report model.

✘ After setting user should Press "Save" button to save the modification.

4.3.3 Autocorrection interface



Press autocorrection button in setting interface to open autocorrection window

Once user activate the internal reference, software will correct the other channels with the stanard of SLOT1 CH1 .if user unactivate this item, input the power value manually.

Procedures:

(activate internal reference)

- 1) Connect patchcord with laser source (FC/APC) and CH1 SLOT1, press zeroing button,software will record the power value of laser source as the reference value of IL test.
- 2) Remove patchcord from CH1 of SLOT1 channel ,connect to the CH2 of SLOT1 and press the relvent correction button,Sofetware will calculate the correction value of three wavelengths according to the difference of SLOT1 CH2 and CH1.
 - 1) Connect the other ports and do the same operation.
 - 2) Save corrected data.

(unactivate internal reference)

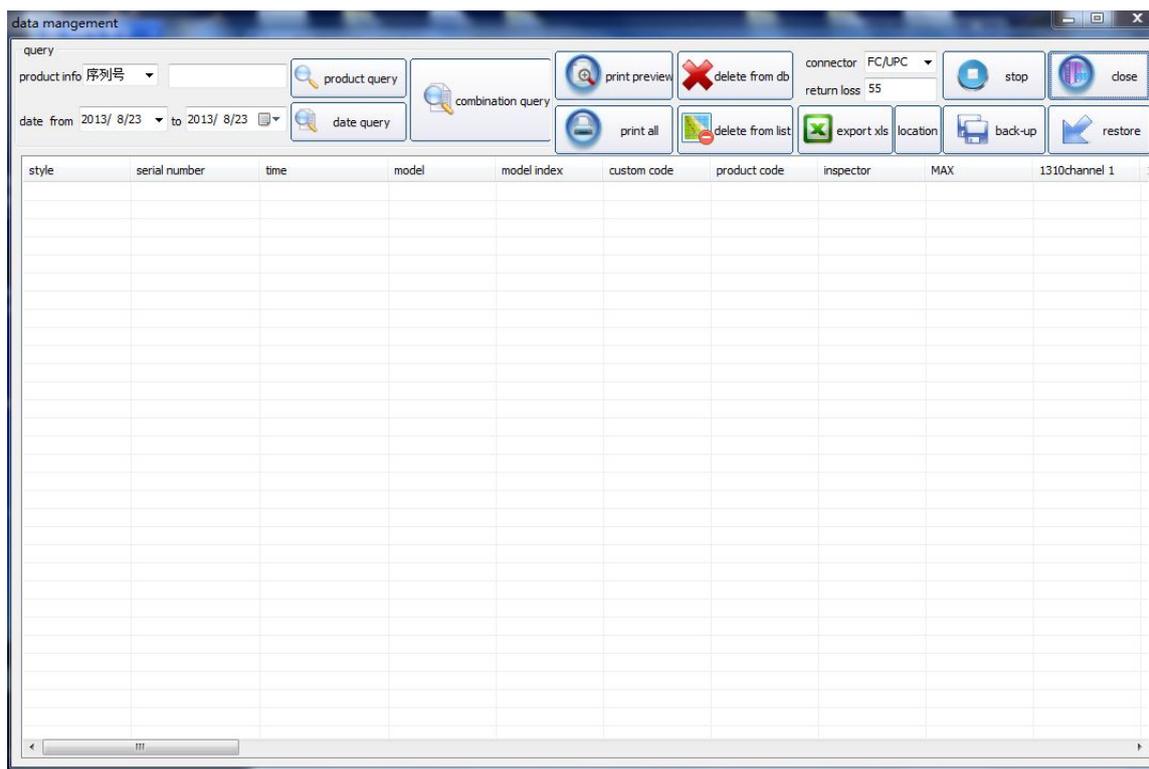
- 1) Connect patchcord with laser source (FC/APC) and power meter, measure the power of three wavelengths. Input the value into “reference value” window. Unactivate the “internal reference”item.
- 2) Connect patchcord with laser source (FC/APC) and SLOT1 CH1 , press relevent zeroing button,software will record the power value of laser source as the reference value of IL test.

3) Remove patchcord from CH1 of SLOT1 channel ,connect to the CH2 of SLOT1 and press the relevant correction button,Software will calculate the correction value of three wavelengths according to the difference of SLOT1 CH2 and CH1

4) Connect the other ports and do the same operation。。

5) Save corrected data

5、 Data management interface



Press “Data” button in test interface to enter data management.

inquire saved data

Preview and print report

Export as excel files

Print inquired data at the same time