Instrument Use Guide

Catalog

Product advantages

High performance MCU, developed based on Linux operating system, quick response

4.3 inch 800 * 480 high-resolution color display+capacitive touch screen

Large dynamic range, supporting long-distance testing

Type-C interface supports USB OTG, and can be connected to USB flash disk and mouse

10000mAh large capacity battery, which can work for a long time

Interface


USB Type-C charging port
and USB disk interface
LED
VFL Interface
OTDR/LS Interface
OPM Interface
Find line port
Network cable
sequencing port
TF card socket

Keypad


Instrument power on indicator (white)
Test indicator (red)
Power key
Up
Left OK Right
Down
OTDR
事件地图
VFL 650nm
VFL
稳定光源
OPM
光功率计
插损测试
寻线对线
系统设置
Zoom, cursor switch key
Save key
OTDR test key
Return key

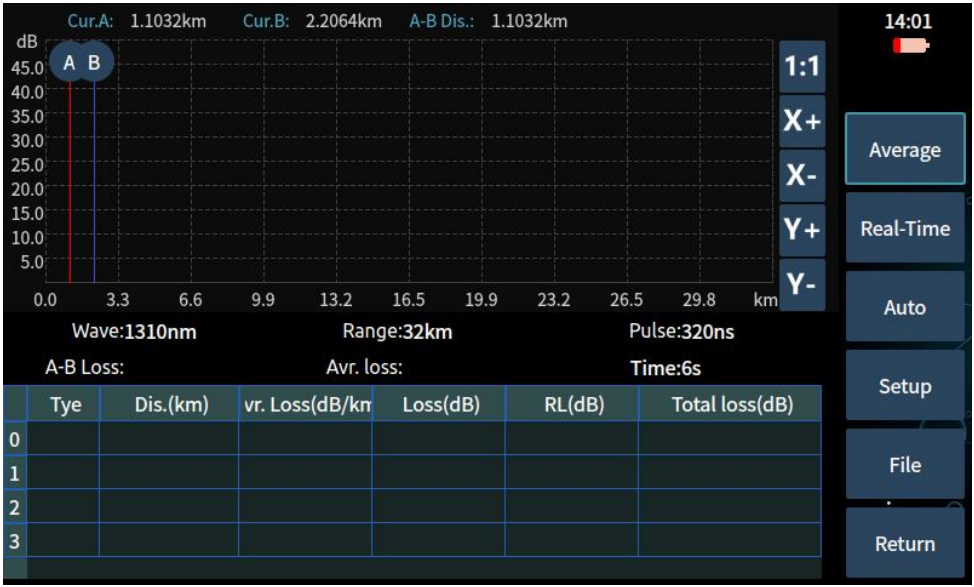
Technical indicators

Fiber type	Single mode fiber			
Display screen	4.3 inch 800 * 480 high brightness color TFT screen+capacitive touch			
Wavelength (nm)	1310/1550±20	1310±20	1550±20	1610±20
Dynamic range (dB)	32/30	30	30	30
Event blind spot	2m			
Attenuation blind spot	10m			
Test range (km)	0.4/0.8/1.6/3.2/6.4/16/32/64/128/256/512			
Test pulse width (ns)	5/10/30/80/160/320/640/1280/5120/10240/20480			
Ranging accuracy	±(0.75 + Sampling interval + 0.0025% × Distance)(Excluding refractive index placement error)(m)			
Ranging resolution	0.25m/1m/4m/8m/16m/32m			
Maximum number of sampling points	256K			
Linearity	0.03dB/dB			
Loss resolution	0.001dB			
IOR set range	1.00000～1.99999			
Optical port type	FC/SC/ST(Replaceable)			
VFL	Output power：>15Mw, Operating mode: CW/1Hz/2Hz			
Stable light source	Output power：>-5dBm, Operating mode: CW/270Hz/1KHz/2KHz			

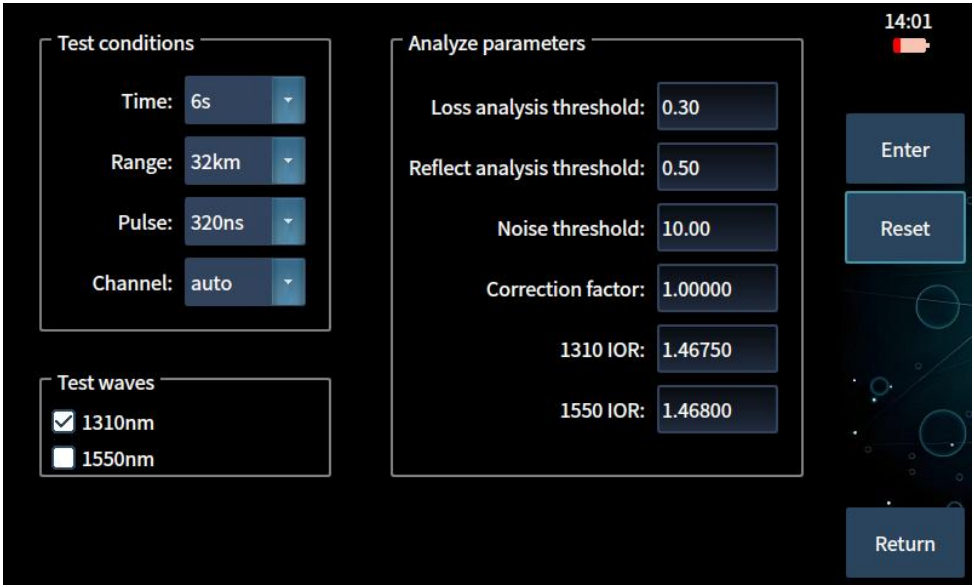
OPM measuring range	-50~+26dBm、-70~+6dBm(Optional)
OPM measuring wavelength	850/980/1270/1300/1310/1490/1550/1577/1625/1650nm
Language	Simplified Chinese, English (please contact the manufacturer for other languages)
External interface	USB Type-C、Micro SD、RJ45*2(Network cable sequencing and line finding)
Battery	3.7V/10000mAh, Continuous working time>10 hours
Charging	USB Type-C interface DC-5V2A input Charging temperature: -8.5℃~74.5℃
Maximum power consumption	10W(not charged)
Environmental adaptability	Working temperature: -10℃～+50℃ Storage temperature: -40℃～+70℃ Relative humidity: 5%～95%, No condensation
Overall dimensions	170mm*110mm*45mm
Weight	600g(including battery)

Operating Instructions

OTDR


Cur.A: 1.1032km
Cur.B: 2.2064km
A-B Dis.: 1.1032km
14:01
dB
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
A B
0.0
3.3
6.6
9.9
13.2
16.5
19.9
23.2
26.5
29.8
km
1:1
X+
X-
Y+
Y-
Average
Real-Time
Auto
Setup
File
Return
Wave:1310nm
Range:32km
Pulse:320ns
A-B Loss:
Avr. loss:
Time:6s
Tye
Dis.(km)
vr. Loss(dB/km
Loss(dB)
RL(dB)
Total loss(dB)
0
1
2
3

Enter the OTDR page and click【**Setup**】to set the measurement parameters and event analysis threshold



Click【**Average**】、【**Real-Time**】、【**Auto**】can be tested

【Average】: Test according to the set parameters. After the test is completed, the measurement results will be automatically analyzed, and the test effect is the best

【Real-Time】: Test according to the set parameters, the test curve will be updated all the time, and the test will not stop until you click **【Stop】**

【Auto】: It will automatically set appropriate test parameters according to the link under test, and then perform the average test

Test curve saving

After the test is completed, click**【File】**->**【Save】**and then enter the file name to save. The same is true for reading files.

Click【**File**】->select the file to read ->【**Read**】

File transfer

Insert SD card or USB flash drive, click【**File**】->【**Transfer**】->【**Refresh**】->select the file to be transferred on the left ->【**Copy**】to transfer the file to SD card or USB flash drive

Curve scaling

Click button 

, Restore Curve; Click button 

, Zoom in and out of X-axis; Click button 

; Zooming in and out of Y-axis

Event map

Reference OTDR

VFL

Select the desired mode, click【**On**】to turn on the red light, and click【**Off**】to turn off the red light

Mode:

CW: Always bright

1Hz: Flashing at 1Hz frequency

2Hz: Flashing at 2Hz frequency

LS

Select wavelength and mode, click【**On**】to open the light source, click【**Off**】to close the light sourc

Mode:

CW: Always bright

270Hz: Flashing at 270Hz frequency

1KHz: Flashing at 1KHz frequency

2KHz: Flashing at 2KHz frequency

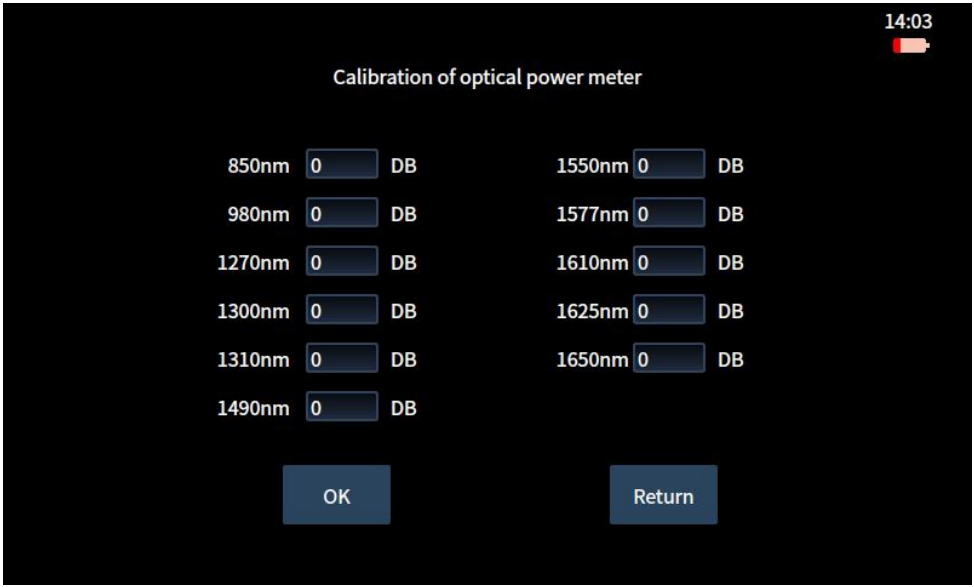
OPM

Select the wavelength to be tested and click【**Start**】

Click【**Ref**】to take the current power value as the reference point for relative power test

Click【**Calibration**】to set the calibration

value

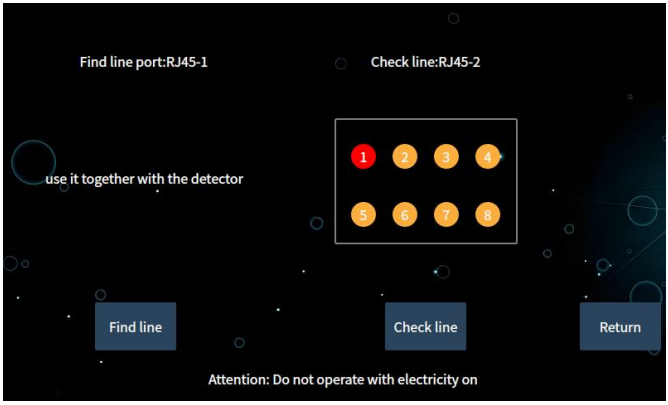

14:03
Calibration of optical power meter
850nm 0 DB
980nm 0 DB
1270nm 0 DB
1300nm 0 DB
1310nm 0 DB
1490nm 0 DB
1550nm 0 DB
1577nm 0 DB
1610nm 0 DB
1625nm 0 DB
1650nm 0 DB
OK
Return

Insert loss


Wave selection
1310nm
1550nm
Optical power meter
-70.00 dBm
Loss
REF: -70.00 dBm
LOSS: 0.00 DB
Start
Ref
Return

Insertion loss test is the simultaneous operation of the light source and the optical power meter. Before the test, connect the light source and the optical power meter with a jumper, click【**Start**】, then click【**Ref**】to set this power value as the reference point, and then connect the link to be tested to the interface between the light source and the optical power meter. At this time, the "Loss Ref" on the screen displays the loss of the link under test

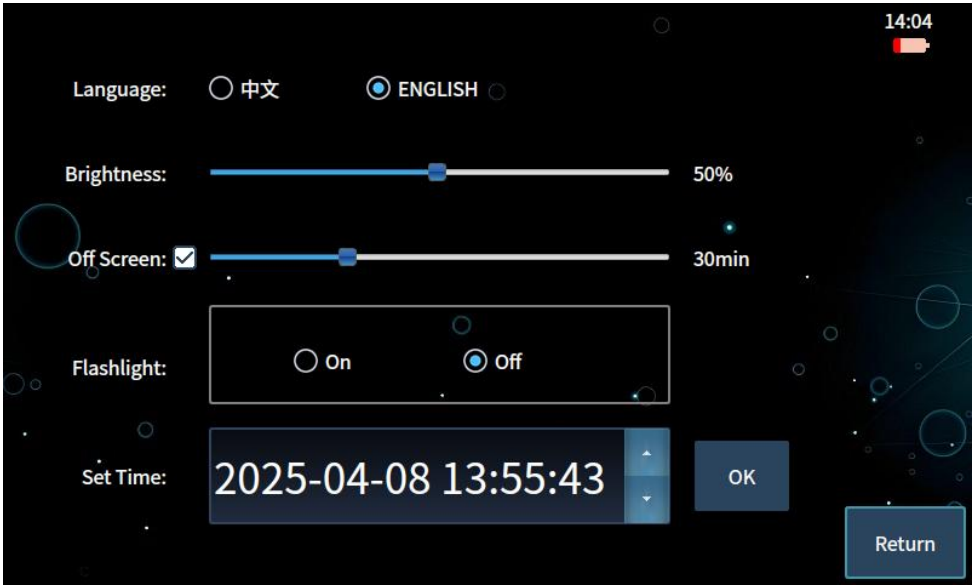
RJ45 test



Line finding: Insert the cable into the RJ45-1 port, click【**Find line**】, and cooperate with the line finder to find the line

Network cable sequencing: Insert the cable into the RJ45-2 port, click【**Check line**】, and align the cable with the alignment device

Sys.setup


14:04
Language:
中文
ENGLISH
Brightness:
50%
Off Screen:
30min
Flashlight:
On
Off
Set Time:
2025-04-08 13:55:43
OK
Return

Click "Language Bar" to set the language

Click the brightness bar to set the screen brightness

Click the rest screen check box to open and close the rest screen function, and click the rest screen time bar to set the rest screen time

Click the "flashlight bar" to turn on and off the flashlight (i.e. LED)

Click the value in the "Set Time Bar", and then click the up and down buttons on the right to adjust the date and time. After adjusting to the required time and date, click **【OK】**