



Instrument Use Guide

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Product advantages

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

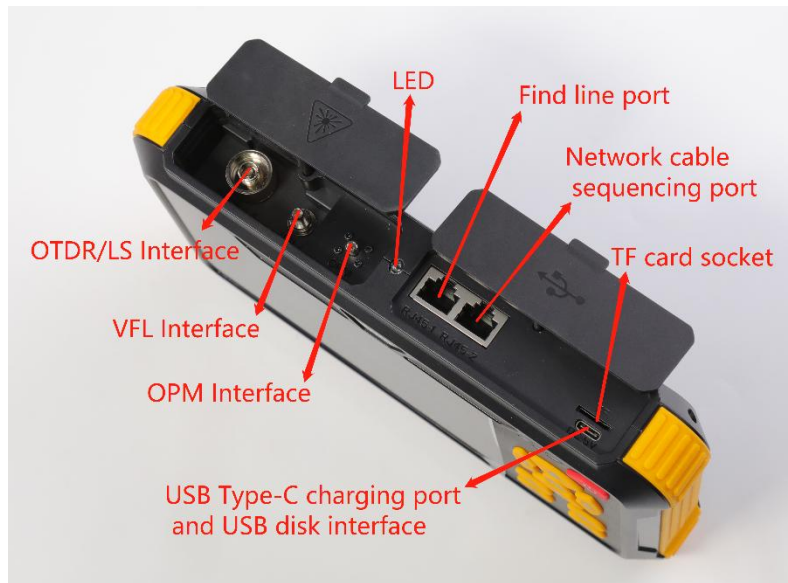
5.0 inch 800 * 480 high-resolution color display+capacitive touch screen

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



Keypad



Technical indicators

Fiber type	Single mode fiber			
Display screen	5.0 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	$\pm(0.75 + \text{Sampling interval} + 0.0025\% \times \text{Distance})$ (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°C~74.5°C
Maximum power consumption	10W(not charged)
Environmental adaptability	Working temperature: -10°C~+50°C Storage temperature: -40°C~+70°C Relative humidity: 5%~95%, No condensation
Overall dimensions	235mm*135mm*45mm
Weight	650g(including battery)

Operating Instructions

14:00



OTDR



Event map



VFL



LS



OPM



Insert loss



RJ45 test

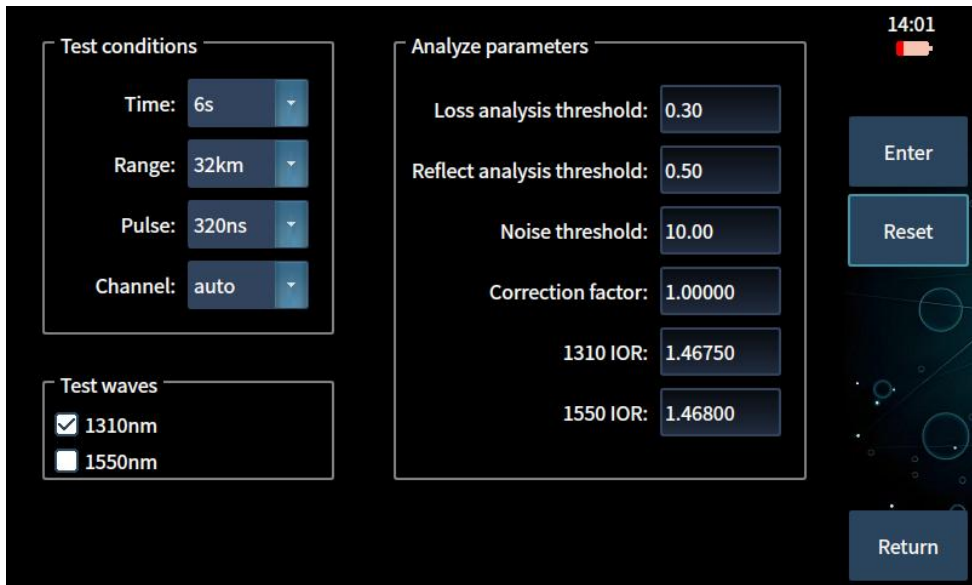


Sys. setup

OTDR



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 **1:1** , Restore Curve; Click button **X+** **X-** , Zoom in and out of X-axis; Click button **Y+** **Y-** ;
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 source

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	<input type="text" value="0"/>	DB	1550nm	<input type="text" value="0"/>	DB
980nm	<input type="text" value="0"/>	DB	1577nm	<input type="text" value="0"/>	DB
1270nm	<input type="text" value="0"/>	DB	1610nm	<input type="text" value="0"/>	DB
1300nm	<input type="text" value="0"/>	DB	1625nm	<input type="text" value="0"/>	DB
1310nm	<input type="text" value="0"/>	DB	1650nm	<input type="text" value="0"/>	DB
1490nm	<input type="text" value="0"/>	DB			

OK

Return

Insert loss

The image shows a software interface for an optical power meter. It features three main data panels and three control buttons on the right side.

Wave selection: A panel with two radio button options: 1310nm and 1550nm.

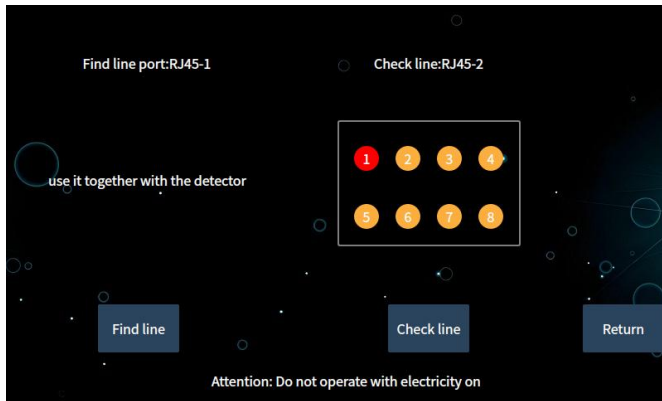
Optical power meter: A panel displaying the current power level as **-70.00 dBm**.

Loss: A panel showing the calculated loss. It includes a reference value: REF: -70.00 dBm, and a loss value: LOSS: 0.00 DB.

Control Buttons: Three buttons are located on the right side: "Start", "Ref", and "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】**

