

Optical fiber test instructions

- 1) Turn on the instrument.
- 2) Clean the end face under test, connect to the OFR. Pay attention to the type of the fiber end face under test. Mismatched connector may cause damage and the incorrect results.
- 3) Press SCAN, it begins to test, and “scanning” is displayed on the screen. No parameters need to be set, and OFR will automatically adjusted in the scanning process.
- 4) When test is completed, all results are displayed. The total number of events can be up to 30, press up and down keys to check every value of the events.
- 5) An empty event is displayed if the measured value is in or out of the blind area.

Attention: Do not look directly at the end or break of the fiber or tail under test to prevent eye damage.

Standard configuration

Host, Instruction manual, Soft pack, SC adapter, 3 AA batteries, Packaging carton.

Common Troubleshooting Solutions

Fault	Possible Cause	Settlements
Instrument can not start	Power is not open	Press switch key
	Insufficient electricity	Charging in time
Incorrect measurement length	Incorrect IOR	Set correct IOR by the manufacturer of fiber
	Contaminated end face of fiber under test	Wipe end face of fiber with absolute ethanol
	Contaminated end face of output connector	Clean with absolute ethanol
	Mismatch of connectors	Replace matched optical fiber jumpers, or use transfer

Daily Maintenance

1. Keep fiber end face clean, oil-free, pollution-free, do not use unclean and non-standard adapter connectors, do not insert the end of the poor polishing surface.
2. Persist in using one adapter as far as possible.
3. When OFR is not in use, please cover the dust cap to protect the end face from being polluted.
4. Carefully insert optical adapter connector to avoid scratches on the port.
5. Periodically clean the sensor surface. When cleaning, please use a special cleaning cotton swab to circumferentially wipe gently.

Warranty regulations

Thanks for purchasing our products. In order to protect your legitimate rights and interests, and to improve the after-sales service, this warranty regulation is formulated. Please read it carefully.

1. 18 months free warranty for this product since the date of purchase, if it exceeds the warranty period, we will charge accessories.
2. During the free warranty period, we have the right to refuse the warranty service and collect the maintenance fee, if:
A: User improper or erroneous operation leads to product failure.
B: Accidents caused by lightning or improper installation;
C: Label is damaged or unauthorized to disassemble the equipment for maintenance.
3. Products under repair are properly packed and shipped. The company is not responsible for any damage or loss in the delivery process.
4. Please read the product instruction carefully before using the product.
5. The warranty card must be stamped and dated to ensure your rights.

Certificate
of Quality

QC: 011

Optical Fiber Ranger Instructions

Overview

Optical Fiber Ranger, by adopting OTDR principle and integrating powerful analysis software, can quickly and accurately detect the location and type of optical fiber and cable fault points and test the distance between the two nodes of optical fiber. One button automatic test, no complex parameter setting, easy to operate. Test results are displayed in the list, and the events can also be viewed through the test curve. Hand held design, small size and light weight, easy to carry, easy to maintain; Large capacity rechargeable lithium battery, energy saving design, long standby time. This instrument is suitable for fault location in engineering construction and maintenance based on FTTx and access network.

Note: the specification version is subject to change without prior notice.

Product features

- ◆ Measure the fault location, loss and fault type of optical fiber link
- ◆ Curve/list two display modes, you can view events through the cursor
- ◆ Automatically save five groups of test results
- ◆ Reliable performance and good reliability
- ◆ One-click operation, no complicated settings, test results at a glance
- ◆ Easily test fiber optic link length and fault point location
- ◆ Integrated VFL function, convenient detection blind area within the fiber fault position
- ◆ Support Micro_USB charging, can be charged with portable battery, suitable for long-term field operations.

Function description

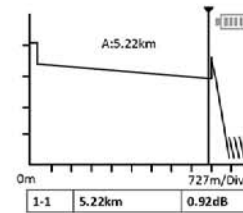
1. LCD display

Display the test results in form of list or curve. After test, it will enter the list mode automatically. The first line shows the total length and loss

of the optical link. The table lists the number, type, location and loss information of the fault points.

L:24.82km LOSS:7.14dB

1	5.06km	0.93dB
2	10.25km	2.32dB
3	24.82km	7.14dB
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In list mode: press▲to enter curve display mode. By pressing▶/◀to move the cursor position. The bottom line shows the total length and loss of the link under test.

2. ⏻: Turn on/off key

Long press this key to start up when the machine is turned off; In the start-up state, long press this key to shut down. Press this key briefly to turn on / off the backlight brightness.

3. ▲: Up key

In test result list interface, short press this key to switch to the curve display interface; Long press this key to enter the refractive index setting interface. Under the refractive index setting interface, press▶/◀switch to adjust the step value; press▲/▼to increase or decrease the refractive index value according to the step value. After setting, press [scan] key to exit. The default refractive index is 1.4680.

REFRACTIVE INDEX n=1.4680 < 0.0001 >
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4. ▼: Down key

In curve display interface, short press this key to enter the test result list interface. Long press this key to enter the view the last five test items. Select the entry by pressing the left and right buttons.

5. ◀/▶: Left / Right key

In curve display interface, you can move the cursor by pressing the left and right keys;

In view interface, press the left and right keys to switch the view items;

In refractive index setting interface, press the left and right keys to switch the step value.

6. SCAN key

Short press to start the automatic test of the instrument. After the test is completed, it will automatically enter the test result list interface.

Long press this key to turn on VFL visual red light fault location function; long press this key again to turn VFL into 1Hz mode; long press again to turn off VFL.

Technical indicators

Optical Fiber Ranger	
Wavelength	1550nm±20nm
Fiber type	SM 9/125μm
Connector	FC/UPC(replaceable SC)
Sensor type	InGaAs
Maximum measuring distance	60km
Unit of measurement	m/km
Event Blind Area	3m
ATT Blind Area	10m
Distance Accuracy (Reflective Events)	±(2m+2×10 ⁻⁴ ×distance)
Visual Fault Location	
Wavelength	650nm±20nm
Output power	≥2mW
Type of connector	FC/UPC(replaceable SC)
Others	
Power Supply	3 AA batteries
Working temperature	-10°C~+40°C
Storage temperature	-40°C~+70°C
Weight (excluding batteries)	≤280g