
## *DESCRIPTION*

Mini OTDR is the most portable test instrument in the industry. It adopts the OTDR technical principles and integrates the powerful analysis software, which enables the OTDR fiber ranger detect fiber fault locations more accurate and easier.

## *FEATURES*

- Portable, rugged, light weight;
- Easy to use;
- More accurate testing results and better repeatability;
- Automatic Pulse Width Control design to ensure a convenient operation;
- Easy to identify the fault locations;
- Built-in visual fault locator (VFL), conveniently to find the faults in dead zone;
- Dust, water and shock proof, designed for field use;
- Long battery life, up to 5000 measurements operation;
- 2.6-inch screen, data saves in SOR format.

## *TECHNICAL SPECIFICATION*

| | |
|---|---|
| **Wavelength** | 1310 nm or 1550 nm |
| **Type of fiber** | 9/125um SM Fiber |
| **Connector** | FC, SC/UPC |
| **Dynamic Range** | 22dB |
| **Pulse Width** | 5ns~8000ns, Auto |
| **Measurement** | m |
| **Event blind zone** | 3 m |
| **Attenuation blind** | 10 m |
| **Range accuracy** | ± (1m+2×10-4×distance) |
| **OPM** | -50~+26dBm |
| **VFL** | ≥ 10mW |
| **Optical Light Source** | 1550 nm |
| iLOM (Event Map) | |
| **Power Supply** | 3 pcs of Dry battery |
| **Battery Work time** | ≥ 2000 times measure |
| **Save Data** | > 500 |
| **Work Temperature** | -5~40 ℃ |
| **Save Temperature** | -10~60 ℃ |
| **Humidity** | 0~85%（no condensation） |
| **Net weight** | 300 g |

## *BUTTON DESCRIPTION*

1. On / off key, when in power-on, short press switch to auto-off function; long press about 3s off. When the top right corner of LED show, the instrument will automatically shut down for about 10 minutes in the state of no key operation.

2. SCAN, Start OTDR module to test the fiber. Press about 6s, enter auto cycle test, press exit again;

3. ▲ - View the previous measurement or choose previous option

4. ▼ - View the next measurement or choose next option

5. ◄ - View a measurement to the left or select an option to the left

6. ► - View a measurement to the right or select an option to the right

7. ENT select the confirm butt on or deselect

8. VFL light shows starting work

## *FUNCTION OPERATION*

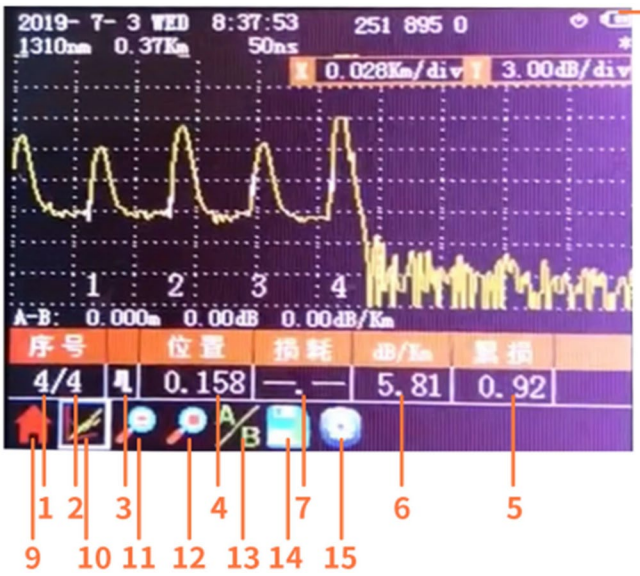

## *CONFIGURATION LIST*

- MINI OTDR
- 3 pcs of dry battery
- USB, SC adapter
- Oxford instrument kit
- User manual

## *INSTRUCTIONS*

1. Starting up, when clean the end face of fiber, connect the interface of OTDR, make the fiber and instrument correctly connect
2. Press ENT setting parameter; pulse width chooses auto. Continuous press ENT confirm and Exit parameter setting or continuous press ◄ exit; Press SCAN start to test and get the results. The theoretical value of refractive index is 1.4677 at 1550 nm.
3. The pulse width is set according to the length of the measuring fiber. Small the pulse width, short the measurement distance, if cannot confirm the fiber length, can use 100ns, then choose the pulse width according to the measurement result curve; if short distance can choose <500 m, if long distance chooses <40 km. The greater the gain, the stronger the signal that can be measured.

**Measurement results as follows:**




(1) Total number of events;

(2) Event Number;

(3) Event type (reflection event);

(4) Event distance;

(5) The loss value from the starting point to that point;

(6) Incident loss per kilometer;

(7) Event connection point loss,

(8) Battery symbol, automatic shutdown symbol;

(9) Main menus;

(10) View curve;

(11) Zoom in or out the curve;

(12) Curve suspend;

(13) Switch the A/B coordinate;

(14) Save data icon;

(15) Set the options icon.


## *CURVE ANALYSIS*

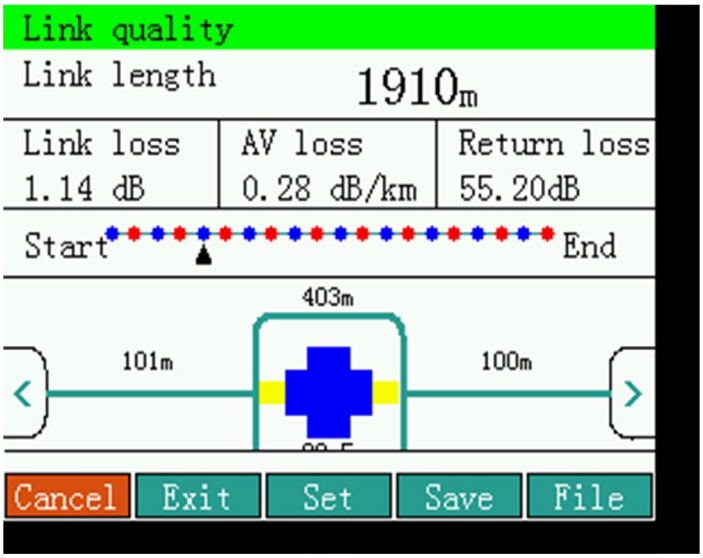
Users could check the state of the fiber through analyzing the testing curve.

(1) (2) (3) Connect point of the fiber.

(4) Fiber end-face.

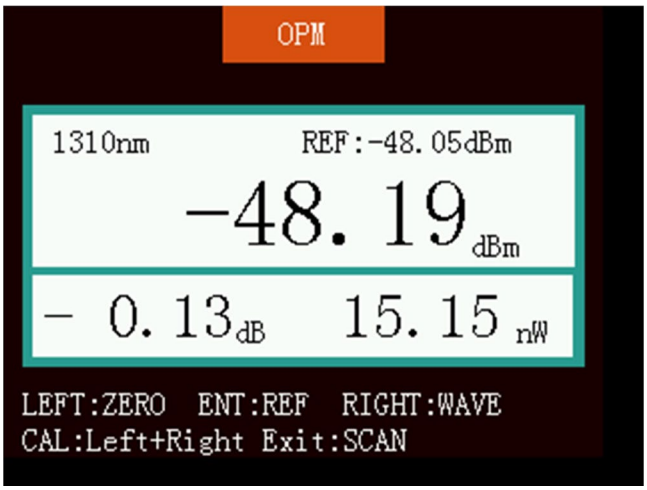
## *iLOM (Event Map)*

The function can be tested automatically by one key and the information of the length of the link, the type of event point and the position of breakpoint can be displayed in a graphical form. The result is easy is clear and easy to understand.



### *OPM*

This function is used to test the power of optical signal and insertion loss of various devices and optoelectronic components. It can identify and measure the frequency of 270/3301k/2kHz frequency optical signal.

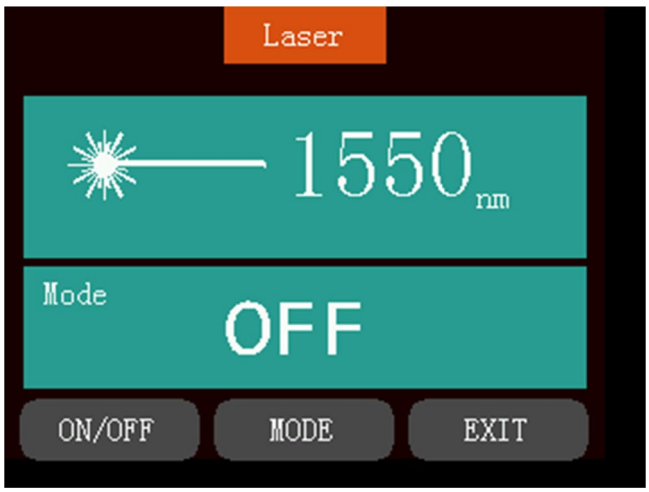



### *VFL FUNCTION*

Connect fiber to VFL port, select VFL in menu, then you could see optical light (650 nm) in breakpoint or fiber end-face.

**Note: Do not see the light directly with your eyes! It is harmful to your eyes.**


### *LASER*



## *DATA SAVING*

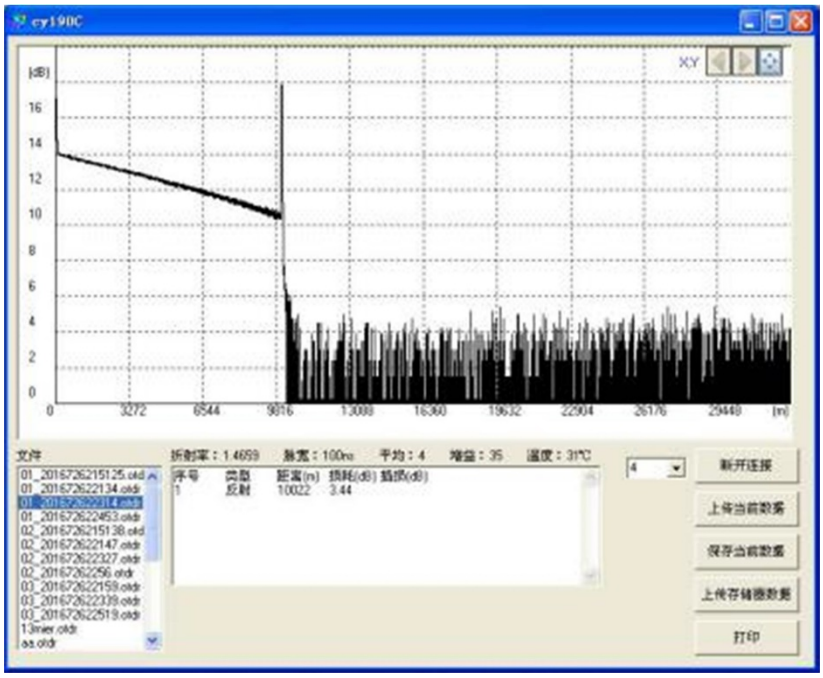
Press ENT button to save the testing data after testing. The ENT button is used to SAVE, READ and EXIT.

MINI OTDR could save more than 500 pcs data.

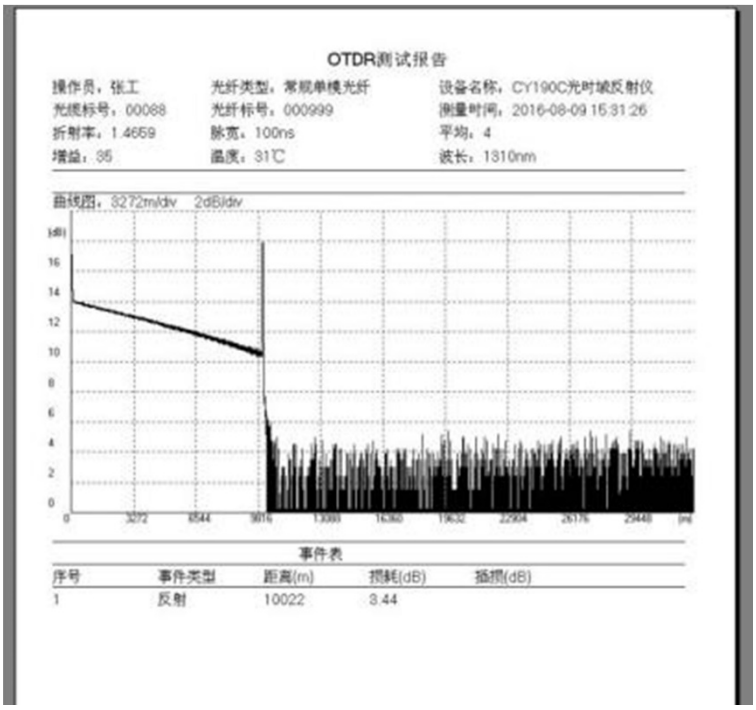
## *DATA PROCESSING*

1. Copy MINI OTDR TRACE file to your computer (files will be provided with testers or users could contact seller for the file). Click usb driver.exe and install USB driver software.


2. After installing the driver software, connect the tester to computer with USB, click MINI OTDR.exe in the file and then the tester will be ready.



3. Connect the tester and derive curve data, and then users can enlarge curve to see details and print testing report.




## *POWER SUPPLY*

MINI OTDR use 3 pcs Alkaline battery to supply power, please change the battery when power is low. Please, remove the battery if the tester is not used for long time.

## *MAINTENANCE*

- Always keep the connector ports of your power meter are clean.
- Once not in use, make sure the dust-proof cap is placed properly over the optical ports.
- Try to use only the adaptor supplied, or will damage the tester.
- Temperature may affect the tester, so do not put the tester in sunshine for long.