

## **FirstFiber**

# FF80D series OTDR

*Convenient multi-function fiber optic tester  
Design for tough outdoor environment*



## FEATURES

- Integrated design, smart and rugged
- Shockproof, outdoor enhanced
- FC / ST / SC / LC Connectors exchangeable
- Automatic and manual test function
- VFL (Visual Fault Location) function
- OTDR Viewer software for data analysis

## APPLICATIONS

- FTTX testing and maintenance
- CATV network testing
- Access network testing
- LAN network testing
- Metro network testing
- Lab and Factory testing
- FTTA troubleshooting

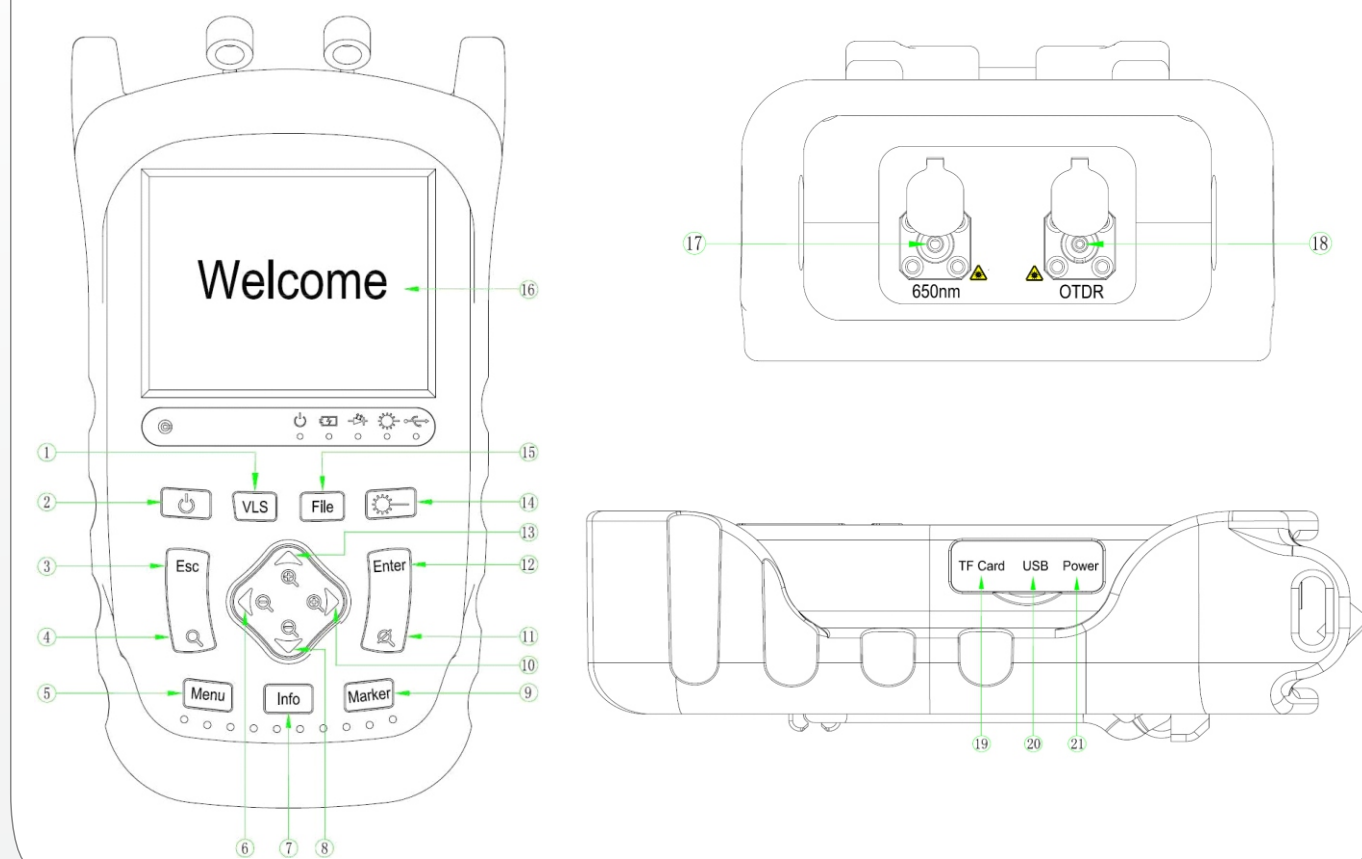
## Ready for all kinds of environment.

FF80D series OTDR is specially designed for tough outdoor jobs. Lightweight, easy operation, low-reflection LCD and more than 8 hours working period make it be perfect in filed testing. FF80D is qualified in the installation and maintenance of FTTx/Access optical networks.

FF80D series OTDR could display Splice loss, Connector loss, Fiber attenuation, Reflection of points, Link optical return loss and distance to fiber events etc. With test information in a smart way, user could get detailed information immediately.

Simplified display style and structured menus help effective in reducing the time of study.

### Schematic diagram

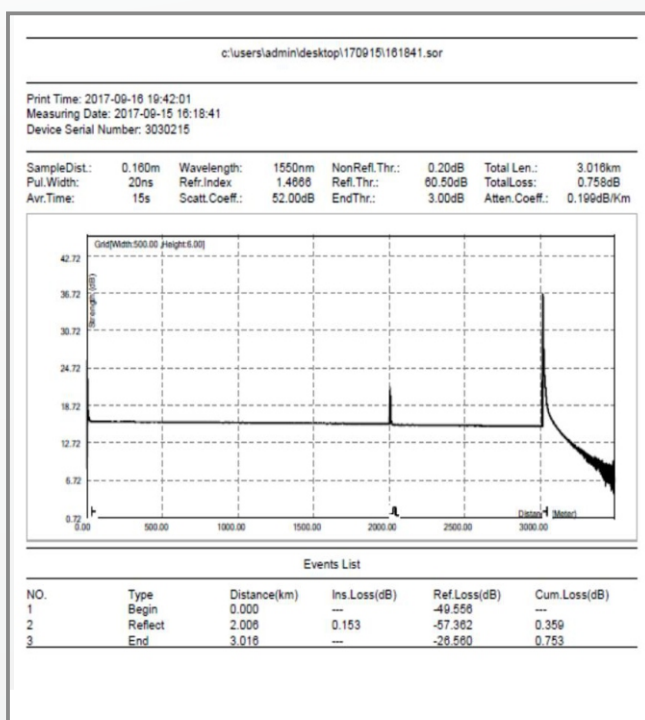
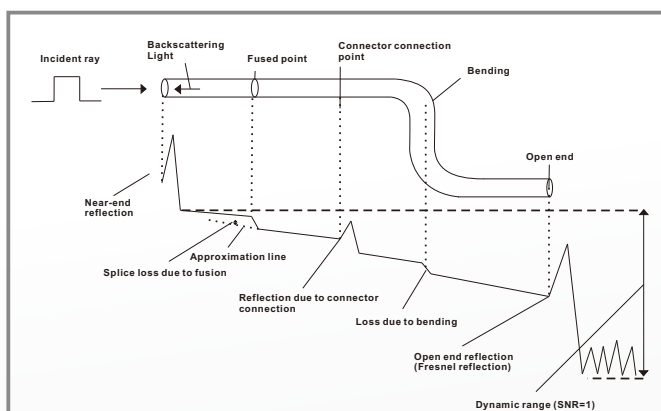
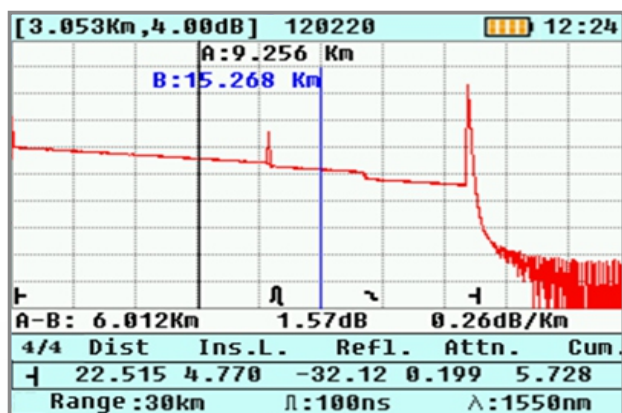


- ① Turn on/off VFL
- ② Power Switch
- ③ Exiting from Current Menu
- ④ Second Function Key
- ⑤ Open/exit from a Menu
- ⑥ Leftward Direction Key
- ⑦ Display Trace Parameter

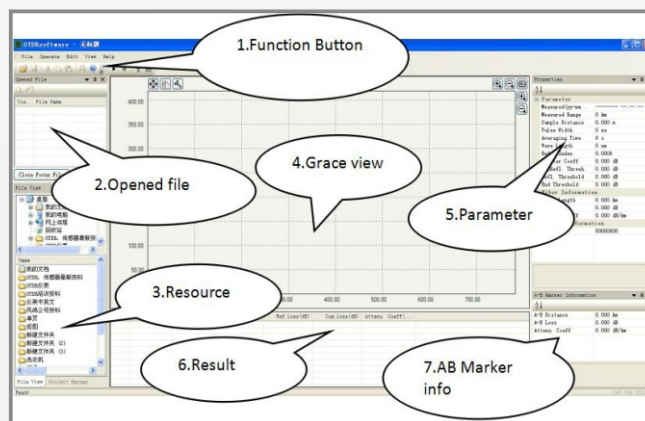
- ⑧ Downward Direction Key
- ⑨ Switch Between A and B
- ⑩ Rightwards Direction Key
- ⑪ Global Trace Display
- ⑫ A Confirmation Key
- ⑬ Upwards Direction Key
- ⑭ Start/stop OTDR Testing

- ⑮ Open/close file System
- ⑯ LCD Screen
- ⑰ Red Light Outlet
- ⑱ OTDR Port
- ⑲ Memory Card Interface
- ⑳ USB Interface
- ㉑ Power Charging Port

## Data Display and Management



### Printed Report



### OTDRviewer PC Software

## VFL Module

Wavelength( $\pm 20$ nm)	650nm
Power	1mW, CLASS II B
Range	5km
Launching Mode	CW/2Hz

## Specification

### General

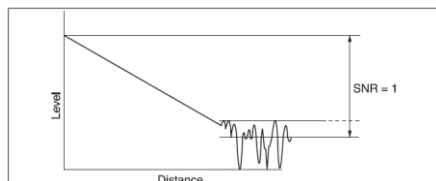
<b>Dimension</b>	210×112×67mm 0.8 kg(battery included)
<b>Display</b>	TFT-LCD with LED backlight
<b>Interface</b>	1×USB port, 1xOTDR port, 1xVFL port, 1xCharging Port
<b>Power Supply</b>	10V(dc), 100V(ac) to 240V(ac), 50~60Hz
<b>Battery</b>	Lithium battery (with air traffic certification) Operating Time: 8 hours①, Telcordia GR-196-CORE Charging time: <3 hours (power off)
<b>Power Saving</b>	Backlight off: Disable/1 to 99minutes Auto shutdown: Disable/1 to 99minutes
<b>DataStorage</b>	Internal memory: 4GB (about 40,000 groups of curves)
<b>Language</b>	User selectable (English, Chinese, Korean, Russian, contact us for availability of others)
<b>Environmental Conditions</b>	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+75℃, ≤95% (non-condensation) Proof: IP65(IEC 60529)
<b>Accessories</b>	Standard: Main unit, power adapter, SC Adapter, ST Adapter, FC adapter, USB cord, User guide, CD disk, carrying case Optional: LC Adapter, Bare fiber adapter

### Test parameter

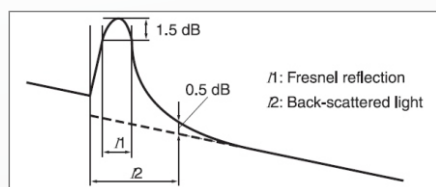
<b>Pulse Width</b>	10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1μs, 2μs, 5μs, 10μs, 20μs
<b>Distance Range</b>	1km, 2km, 4km, 8km, 15km, 30km, 60km, 90km, 120km, 160km
<b>Sampling Resolution</b>	Minimum 16cm
<b>Sampling Point</b>	Maximum 128,000 points
<b>Linearity</b>	≤0.05dB/dB
<b>Averaging Time</b>	5s, 15s, 30s, 1min, 2min, 3min
<b>Auto Off</b>	off, 10min, 30min, 60min
<b>Distance Accuracy</b>	$\pm(1m + \text{measuring distance} \times 3 \times 10^{-5} + \text{sampling resolution})$ (excluding IOR uncertainty)
<b>Screen Backlight</b>	≤100
<b>IOR Setting</b>	1.0000~2.0000, 0.0001 step
<b>Units</b>	km
<b>OTDR Trace Format</b>	Telcordia universal, SOR, issue 2(SR-4731) OTDR: User selectable automatic or manual set-up Auto or manual operation, displayed in table format
<b>Fiber Event Analysis</b>	User defined PASS/FAIL thresholds: -Reflective and non-reflective events: 0.01 to 1.99dB (0.01dB steps) -Reflective: 0.01 to 32dB (0.01dB steps) -Fiber end/break: 3 to 20dB (1dB steps)

### Notes

- Dynamic range is measured with maximum pulse width, averaging time is 3 minutes, SNR=1; The level difference between the RMS noise level and the level where near end back-scattering occurs.



- Event dead zone is measured with pulse width of 10ns; attenuation dead zone is also measured with pulse width of 50ns.



### Ordering Information

Model#	Testing Wavelength	Dynamic Range	Event/ Attenuation Dead Zone
FF80D28	1310/1550nm	28/26dB	1.5/8m
FF80D32	1310/1550nm	32/30dB	1.5/8m
FF80D35	1310/1550nm	35/33dB	1.5/8m
FF80D37	1310/1550nm	37/35dB	1.5/8m

*The Kit Includes: OTDR, FC/SC/ST Connector, User Manual, USB Cord, CD, OTDRviewer Software, Power Charging Adapter, Cleaning Tool, Carrying Case, Certificate of Calibrate*

★ Product specifications and descriptions in this document subject to change without notice.

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