Ver.4.06

FF-990PRO

Standard OTDR-Professional Traditional OTDR
Splitter OTDR-Optimized for GPON EPON Splitter Network

All-in-One

- OTDR
- Event Map
- Visual Fault Locator (VFL)
- Optical Power Meter (OPM)
- Optical Light Source (OLS)
- Print Report (PC Software)
- Fiber Microscope (Optional)
- Remote Control (Optional)

CE ROHS

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

Ready for all kinds of environment.

FF-990PRO 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. FF-990PRO is qualified in the installation and maintenance of FTTx/Access optical networks.

FF-990PRO 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.

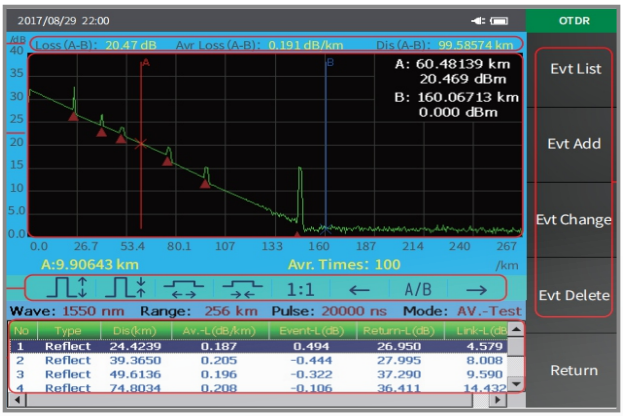
Multi Functions

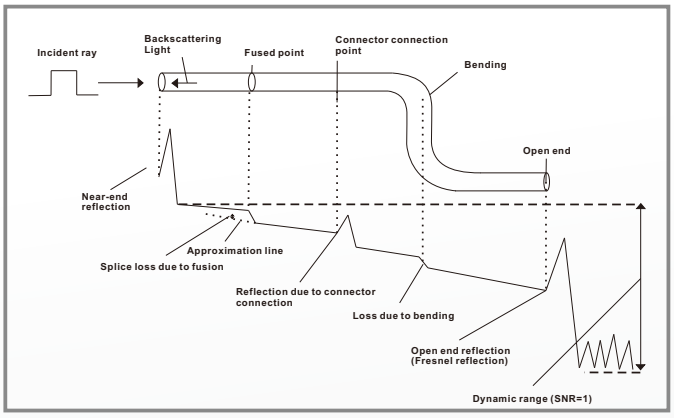
ALL in ONE

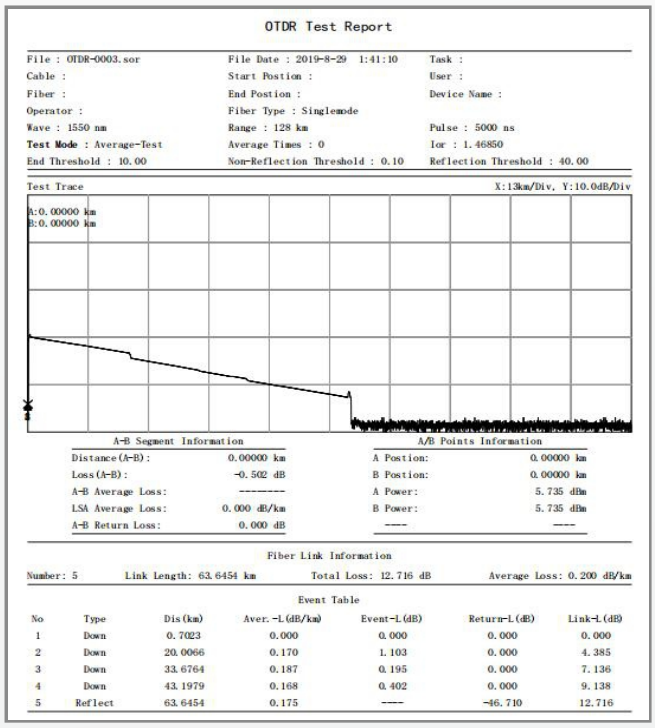
- OTDR
- Light Source
- Power Meter
- VFL[1]
- Inspector[2]
- Event Map[3]
- I.L. Testing[4]
- Report Print[5]

1. VFL is short for Visual Fault Loctor which shines out red light (650nm) for locating cable break point.
2. The inspector is used to check fiber connector's endface. Inspection probe is sold separately.
3. Events Map displays human friendly ico to indicate events.
4. OPM and OLS can be turned on same time to test insertion loss.
5. The OTDR comes with PC software to help print out test reports.

Data Display and Management







OTDR Test Report

File : OTDR-0003.sor	File Date : 2019-8-29 1:41:10	Task :
Cable :	Start Postion :	User :
Fiber :	End Postion :	Device Name :
Operator :	Fiber Type : Singlemode	
Wave : 1550 nm	Range : 128 km	Pulse : 5000 ns
Test Mode : Average-Test	Average Times : 0	Ior : 1.46850
End Threshold : 10.00	Non-Reflection Threshold : 0.10	Reflection Threshold : 40.00

Test Trace X:13km/Div, Y:10.0dB/Div

A:0.00000 km
B:0.00000 km

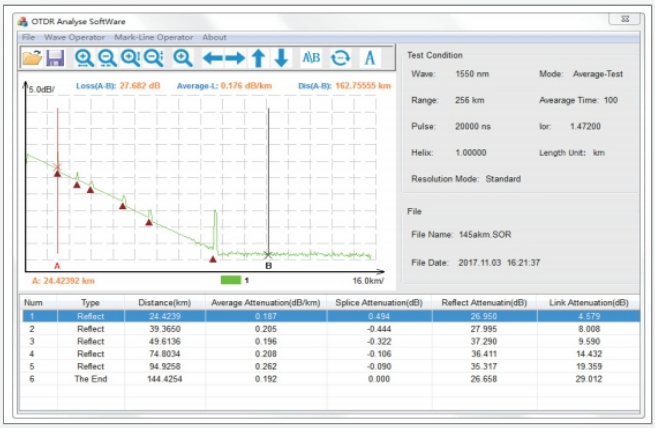
A-B Segment Information		A/B Points Information	
Distance(A-B):	0.00000 km	A Postion:	0.00000 km
Loss(A-B):	-0.502 dB	B Postion:	0.00000 km
A-B Average Loss:	--------	A Power:	5.735 dBm
LSA Average Loss:	0.000 dB/km	B Power:	5.735 dBm
A-B Return Loss:	0.000 dB	----	----

Fiber Link Information

Number: 5 Link Length: 63.6454 km Total Loss: 12.716 dB Average Loss: 0.200 dB/km

Event Table

No	Type	Dis(km)	Aver.-L(dB/km)	Event-L(dB)	Return-L(dB)	Link-L(dB)
1	Down	0.7023	0.000	0.000	0.000	0.000
2	Down	20.0066	0.170	1.103	0.000	4.385
3	Down	33.6764	0.187	0.195	0.000	7.136
4	Down	43.1979	0.168	0.402	0.000	9.138
5	Reflect	63.6454	0.175	----	-46.710	12.716



● **Printed Report**

● **OTDRviewer PC Software**

VFL Module

Wavelength(±20nm)	650nm
Output power	10mW,CLASSII B
Range	10km
Launching Mode	CW/2Hz

Specification

General

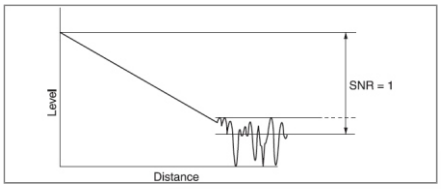
Dimension	227×160×70mm 1.2 kg(battery included)
Display	TFT-LCD with LED backlight (Touch Screen)
Interface	1×USB, 1xmini USB, 2xOTDR port, 1xVFL port, 1xPower Meter Port, 1xCharging Port
Power Supply	Input: 100V(AC) to 240V(AC), 50~60Hz; Output: 12V (DC) to 19V (DC), 1.5A
Battery	Lithium battery 7.4V, 5200mAh (with air traffic certification) Operating Time: 8 hours Charging time: <3 hours (power off)
Power Saving	Backlight off: Disable/1 to 99minutes Auto shutdown: Disable/1 to 99minutes
DataStorage	Internal memory: 4GB (about 40,000 groups of curves)
Language	English Spanish, Portuguese, etc customized
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -40℃~+70℃, ≤95% (non-condensation) Proof: IP65(IEC 60529)
Accessories	Standard: Main unit, power adapter, SC Adapter, FC adapter, USB cord, User guide, CD disk, carrying bag Optional: LC Adapter, ST Adapter Bare fiber adapter

Test parameter

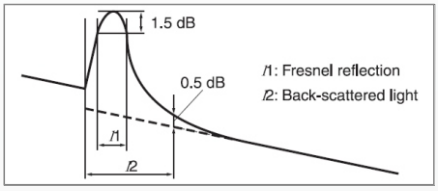
Pulse Width	3ns,5ns,10ns,30ns,50ns,80ns,160ns,320ns,500ns,800ns,1μs,3μs,5μs,8μs,10μs,20us
Distance Range	0.5km, 1km, 2km, 4km, 8km, 16km, 32km, 64km, 128km, 256km
Sampling Resolution	Minimum 16cm
Sampling Point	Maximum 256,000 points
Linearity	≤0.05dB/dB
Averaging Times	1 to 3000
Auto Off	off, 15mins, 30mins, 1hours, 2hours, 4hours
Distance Accuracy	±(0.75m+measuring distance×3×10^{-5}+sampling resolution) (excluding IOR uncertainty)
Screen Backlight	≤100
IOR Setting	1.0000~2.0000, 0.00001 step
Units	km, mi, ft
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731) OTDR: User selectable automatic or manual set-up Auto or manual operation, displayed in table format
Fiber Event Analysis	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

1. 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.



2. 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
FF-990PRO-S0	1310/1550nm	32/30dB	1/8m
FF-990PRO-S1	1310/1550nm	35/33dB	1/6m
FF-990PRO-S2	1310/1550nm	38/36dB	0.8/6m
FF-990PRO-S3	1310/1550nm	42/40dB	0.8/6m
FF-990PRO-S4	1310/1550nm	45/43dB	0.8/6m
FF-990PRO-M1	850/1300nm	28/26dB	1/6m
FF-990PRO-T1	1310/1490/1550nm	37/35/35dB	0.8/6m
FF-990PRO-T2	1310/1550/1625nm	37/35/35dB	0.8/6m
FF-990PRO-Q1	850/1300/1310/1550nm	28/26/37/35dB	1/6m
* FF-990PRO-PD1	1310/1550nm	37/35dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PS1	1625nm	38dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PS2	1650nm	38dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PT1	1310/1550/1625nm	38/36/36dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PT2	1310/1550/1625nm	40/38/38dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PT3	1310/1550/1625nm	42/40/40dB	0.8/6m (Splitter: 30m)
* FF-990PRO-PT4	1310/1550/1650nm	38/36/36dB	0.8/6m (Splitter: 30m)

Splitter Testing Video Demo

**Optimized for EPON GPON Fiber Network*
The Kit Includes: OTDR, FC/SCConnector, User Manual, Touch Pen, USB Disc OTDRviewer Software, Power Charging Adapter, Cleaning Tool, Carrying Bag, Certificate of Calibrate