High Accurate OTDR

OPTIMIZED FOR FTTx/MDU FIBER DEPLOYMENTS
AND TROUBLESHOOTING, SUITABLE FOR METRO

Fully featured, high accurate, dedicated OTDR with human engineering design, suitable for metro and optimized to test through optical splitters, for seamless end-to-end FTTH characterization and troubleshooting.

FEATURES

Built-in Optical Light Source (OLS) Module

Built-in Optical Power Meter (OPM) Module

Built-in Visual Fault Locator (VFL) Module

Intelligent Event Identifying Function

FC/SC/ST/LC Connectors Interchangeable

Auto/manual/Real Time/Average Time Testing

Dual-battery for Heavy Testing Task

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

THE HANDHELD OTDR... REINVENTED

The 8000MAX series is handy, lightweight and rugged enough for any outside plant environment. With a 5.6-inch, outdoor-enhanced touchscreen–the most efficient handheld display in the industry–it delivers an unprecedented user experience. Its intuitive concise GUI ensures a fast learning curve. Plus, its new and improved environment offers icon-based functions, instant boot-up, as well as improved auto and real-time modes.

The 8000MAX series is a line of genuine high-performance OTDRs from the world's leading manufacturer. It delivers FirstFiber's tried and true OTDR quality and accuracy along with the best optical performance for right-first-time results, every time.

The amazing 8-hour battery life will never let a technician down, and the plug-and-play hardware options like fiber inspection probe and USB tools, make every technician's job easier.

Most importantly, the 8000MAX series is finally bringing the Event Map, an intelligent OTDR-based application, to the handheld market. This advanced software turns even the most complex trace analysis into a simple, one-touch task.

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) to locate 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 at same time to test insertion loss.

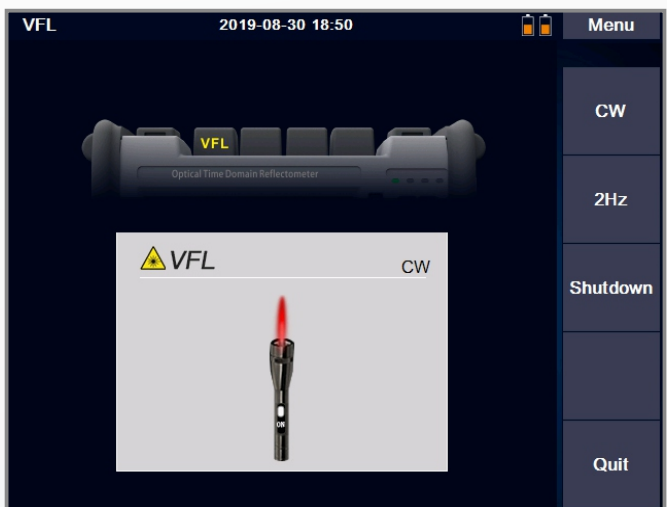[5] The OTDR comes with PC software to help print out test reports.

Functions Display

OTDR

OTDR   2019-08-31 01:27
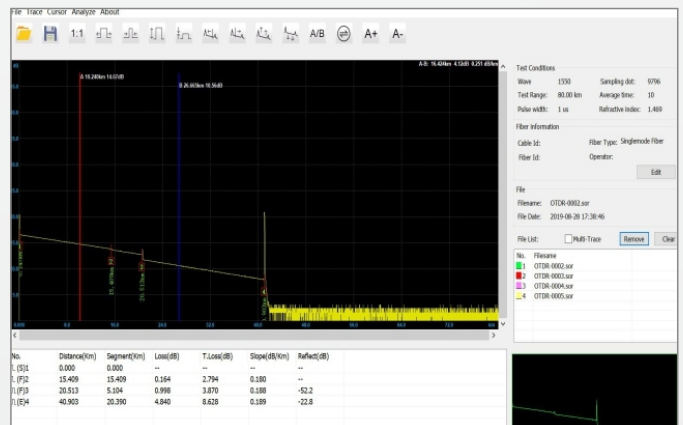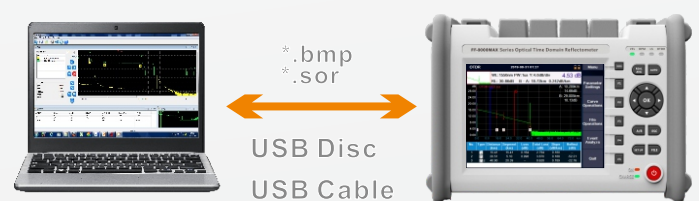
WL:1550nm PW:1us Y:4.0dB/div   **4.53 dB**
RL: 30.86dB   B - A: 18.72km   0.242dB/km

OTDR-0002.sor

A: 10.289km   14.66dB
B: 29.005km   10.13dB

No.	Type	Distance (km)	Segment (km)	Loss (dB)	Total Loss (dB)	Slope (dB/km)	Reflect (dB)
1	⌐	15.41	15.41	0.164	2.794	0.180	--
2	⌐	20.51	5.10	0.998	3.870	0.188	-52.21
3	⌐E	40.90	20.39	--	8.628	0.189	-22.76

Menu | Parameter Settings | Curve Operations | File Operations | Event Analyze | Quit

● **OTDR**

Power Meter

Power Meter   2019-08-30 18:49

⚠ OPM 850nm   Ref : 0dBm

< -70   **dBm**

0.10	nW
< -70	dB
CW	Hz

Menu | Start | WL Switch | REF | Zero | Quit

● **Optical Power Meter**

LS

LS   2019-08-30 18:50

⚠ LS   1310nm   CW

Menu | Start | WL Switch | Freq Switch | Quit

● **Optical Light Source**

VFL

VFL   2019-08-30 18:50

⚠ VFL   CW

Menu | CW | 2Hz | Shutdown | Quit

● **Visual Fault Locator**

Printed Testing Report

OTDR REPORT

OTDR v2.20   2019-08-31 02:26:06

Job
Job ID : 900   File : OTDR-0002.sor
Contractor: gpo   Date : 2019-08-28 17:38:46
Customer : wcq   Operator: wen

Configuration
Wavelength(nm): 1550   Range(m) : 80000   Backscatter coeff(dB) : -80.000
Pulse(ns) : 1000   Average Time(s): 10   Loss threshold(dB) : Auto
Origin   End   Reflectance threshold(dB) : Auto
Location: 1   Location: 2   End of fiber threshold(dB) : Auto
Cable : 1   Cable : 2   Refractive Index : 1.469
Fiber : 1   Fiber : 2
Color : 1   Color : 2

Comment
0

Trace

A: 0.147km   B: 26.665km   A-B: -26.518km
16.68dB   10.56dB   6.12dB
   -0.231dB/km

Event Type	Distance (km)	Segment (km)	Loss (dB)	Total Loss(dB)	Attenuation (dB/km)	Reflectance(dB)
1Reflect (S)	0.147	0.000	---	---	---	---
2Reflect (F)	15.409	15.262	0.164	2.794	0.180	---
3NonReflect(F)	20.513	5.104	0.998	3.870	0.188	-52.209
4NonReflect(E)	40.903	20.390	4.840	8.628	0.189	-22.756

● **Printed Testing Report**

*.bmp
*.sor

USB Disc
USB Cable

● **PC Software**

Specification

General

Size/Weight	215×155×68mm 1.1kg (Battery included)
Display	5.6 inch touch-sensitive TFT-LCD Screen
Interface	1×USB, 1xmini USB, 2xOTDR port, 1xVFL port, 1xPower Meter Port, 1xCharging Port
Power Supply	10V(dc), 100V(ac) to 240V(ac), 50~60Hz 7.4V/2500mAh x 2 lithium battery (with air traffic certification)
Battery	Operating Time: 8 hours, charging time: <3 hours
Power Saving	Back light: Common/Highligh/Power saving/Customized Auto power off: Never/1min/5min/10min/30min/60min
Data Storage	Internal memory: 16GB (about 100,000 curves)
Language	English, Spanish, French, Korean, Italian, Russian, Portugal, Hebrew
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+75℃, ≤95% (non-condensation)

OTDR Module

Pulse Width	3ns, 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1μs, 2μs, 5μs, 10μs, 20μs
Distance Range	100m, 500m,2km, 5km, 10km, 20km, 40km, 80km, 120km, 200km, 250km
Sampling Resolution	Minimum 5cm
Sampling Point	Maximum 256,000 points
Linearity	≤0.05dB/dB
Averaging Time	10s, 15s, 30s, Real Time, Customized
Scale Indication	X axis: 4~70m/div, Y axis: 0.09~5dB/div
Distance Accuracy	±(1m+measuring distance×3×10^-5+sampling resolution) (excluding IOR uncertainty)
Loss Threshold	0.01dB
Loss Resolution	0.001dB
Distance Resolution	0.01m
IOR Setting	1.2000~1.5999, 0.0001 step
Units	km, miles, kfeet
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731)

VFL Module

Wavelength	650nm
Output Power	10mw, CLASSIII B
Range	12km
Launching Mode	CW/2Hz

OPM Module

Wavelength	850/1300/1310/1490/1550/1625/1650nm
Test Range	-70~+ 10dBm
Resolution	0.01
Accuracy	±0.35dB±1nW
Modulation	270/1k/2k Hz, Pi≥-40dBm

OLS Module

|	
Wavelength	Same as OTDR Wavelengths
Output Power	-5dBm±1dB
Output mode	CW/270/1k/2k Hz

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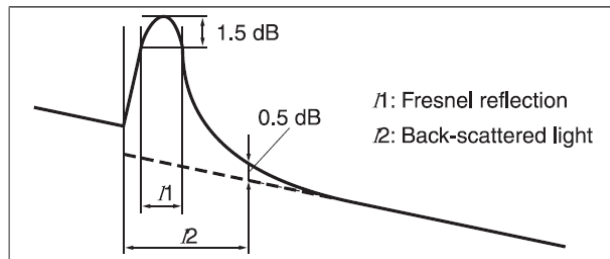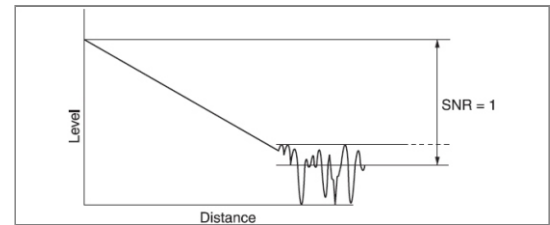
Event dead zone is measured with pulse width of 10ns; attenuation dead zone is also measured with pulse width of 50ns.

Instructions of OTDR Curves and Events that displayed on OTDR screen.
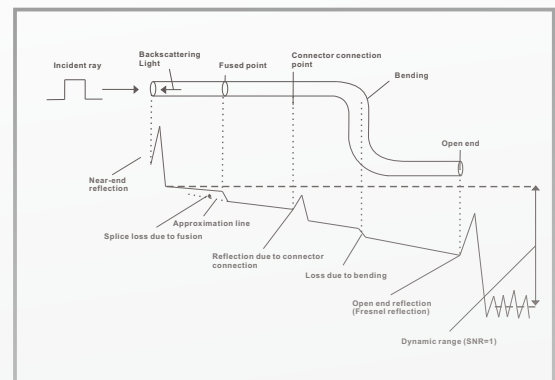
Ordering Information

Model#	Testing Wavelength	Dynamic Range	Event/ Attenuation Dead Zone
S1	1310/1550nm	32/30dB	0.8/4m
S2	1310/1550nm	35/33dB	0.8/4m
S3	1310/1550nm	37/35dB	0.8/4m
S4	1310/1550nm	40/38dB	0.8/4m
S5	1310/1550nm	42/40dB	0.8/4m
S6	1310/1550nm	45/43dB	0.8/4m
T2	1310/1550/1625nm	35/33/32dB	0.8/4m
T3	1310/1550/1650nm	35/33/32dB	0.8/4m
T4	1310/1550/1625nm	40/38/37dB	0.8/4m
T5	1310/1550/1650nm	40/38/37dB	0.8/4m
T6	1310/1550/1625nm	42/40/38dB	0.8/4m
T7	1310/1550/1650nm	42/40/38dB	0.8/4m
T8	1310/1550/1625nm	45/43/43dB	0.8/4m
M1	850/1300nm	20/26dB	1.2/5m
Q1	1310/1550/850/1300nm	28/26/20/26dB	0.8/4m, 1.2m/5m
Q2	1310/1550/850/1300nm	35/32/20/26dB	0.8/4m, 1.2m/5m

The Kit Includes: OTDR, FC/SC Connector, User Manual, Touch Pen, OTDRviewer Software, Power Charging Adapter, Cleaning Tool, Carrying Case, Certificate of Calibrate

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