FF-980MAS ENHANCED OTDR

All in 1 Device, Pocket-sized, Multi Functions, Easy-to-use, and Affordable for Technicians at Any Level

- Auto OTDR
- Expert OTDR
- Event Map
- Optical Power Meter
- Optical Light Source
- Insertion Loss
- Visual Fault Locator
- RJ45 Cable Tracking
- RJ45 Cable Sequence
- RJ45 Cable Length
- Endface Inspector
- LED Light

- FTTX Testing and Maintenance
- CATV Network Testing
- Access Network Testing
- LAN Network Testing
- Metro Network Testing
- FTTA Troubleshooting

- Single, dual wavelength light-weight OTDR
- Combines all essential fiber tests in one handheld with OPM, OLS, VFL, etc
- Easy to understand OTDR analysis with event map result view
- Access network or point-to-point network verification or troubleshooting
- Upgrades easily in the field
- All-day battery life

Configuration

		Hot Sale			
Model#	**980MAS-S0**	**980MAS-S1**	**980MAS-S2**	**980MAS-P1**	**980MAS-P2**
Wavelength	1550nm	1310nm & 1550nm	1310nm & 1550nm	1310nm	1610nm
Dynamic Range	24dB	24/22dB	26/24dB	26dB	22dB
Testing Range	3m to 80km	3m to 80km	3m to 100km	3m to 100km	3m to 60km
OTDR	√	√	√	√	√
Power Meter	√	√	√	√	√
Light Source	√	√	√	√	√
Visual Fault Locator	√	√	√	√	√
Insertion Loss Testing	√	√	√	√	√
Event Map	√	√	√	√	√
Endface Inspector[1]	√	√	√	√	√
RJ45 Sequence	√	√	√	√	√
RJ45 Length	√	√	√	√	√
Rj45 Digital Tracker	√	√	√	√	√
In-service Testing[2]	x	x	x	√	√

Request a Remote Demo
sales@FirstFiber.cn

The Kit Includes: OTDR, FC/SC Connector, User Manual, PC Software, Charging Adapter, RJ45 Cable Tracker, RJ45 Remote Unit USB Cable, Carrying Case, Certificate of Calibrate

Note: 1. Endface Inspector probe is sold separately, Contact Sales to confirmed if it is available now.
2.980MAS-P1 & 980MAS-P2 are both with Wavelength Filter. In-service signal power <-5dBm @ 980MAS-P1, <0dBm@980MAS-P2

General

Size/Weight	173x109x45mm/ 450g (Battery included)
Display	4.3 inch touch-sensitive IPS TFT-LCD Screen, 800x480 Resolution
Interface	1×USB,1xTF port,1xOTDR port, 1xVFL port, 1xPower Meter Port, 2xRJ45 Port
Power Supply	AC/DC Adapter, Input: 100V(ac) to 240V(ac), 50~60Hz, 0.6A; Output: 5V(DC), 2A
Battery	Lithium battery, 4000mAh/3.7V (with air traffic certification)
Operation Time	>12 hours
Back Light	Back light brightness: 0%, 20%, 40%, 60%, 80%, 100%
Power Saving	Auto power off: Never/5min/15min/30min/45min/60min
Data Storage	SD Card: 8GB, >200,000 Curves
Language	English, Spanish, French, Russian, Vietnam, etc
Booting Time	<10 seconds
Beep Sound	Beep can be turned on or off
Multi Tasks	The meter support VFL and LED light working at back end
Screen Shot	The meter support screen shot
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -40℃~+70℃, ≤95% (non-condensation)

OTDR Module

Pulse Width	3ns,5ns,10ns,30ns,50ns,80ns,160ns,320ns,500ns,800ns,1μs,2μs,5μs,8μs,10μs,20μs
Distance Range	500m,1km, 2km, 4km, 8km, 16km, 32km, 64km, 100km
Sampling Resolution	0.05m to 8m
Sampling Point	Maximum 128,000 points
Linearity	≤0.05dB/dB
Averaging Time	5s, 15s, 30s, 60s, 120s, 180s
Loss Analysis	4-point method/5-point method
Distance Accuracy	±(1m+measuring distance×3×10^-5+sampling resolution) (excluding IOR uncertainty)
Loss Threshold	0.20dB
Loss Resolution	0001dB
Distance Resolution	0.001m
IOR Setting	1.0~2.0, 0.001 step
Units	km, mi, kft
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731)

VFL Module

Wavelength	650nm
Output Power	10mw, CLASSIII B
Range	12km
Launching Mode	CW/1Hz/2Hz

OPM Module

Wavelength	850/980/1300/1310/1490/1550/1625/1650nm
Test Range	-70~+ 10dBm or -50~+ 26dBm
Resolution	0.01dB
Uncertainty	5%
Accuracy	±0.35dB±1nW
Frequency	Frequency Identification, CW/270Hz/330Hz/1kHz/2kHz, Pi≥-40dBm
Connector	2.5 mm universal connector

OLS Module

Wavelength	Same as OTDR Wavelengths
Output Power	-5dBm
Modulation Mode	CW/270Hz/330Hz/1kHz/2kHz
Laser Type	FP-LD

Rj45 Cable Tracker

Testing Range	300 meters
Signal Type	Analog signal/Digital Signal
Active Cable Track	Support
Signal Receiver	Sent as a default Accessories
Warning Sound	Yes
Rj45 Cable Type	Support both 568A and 568B

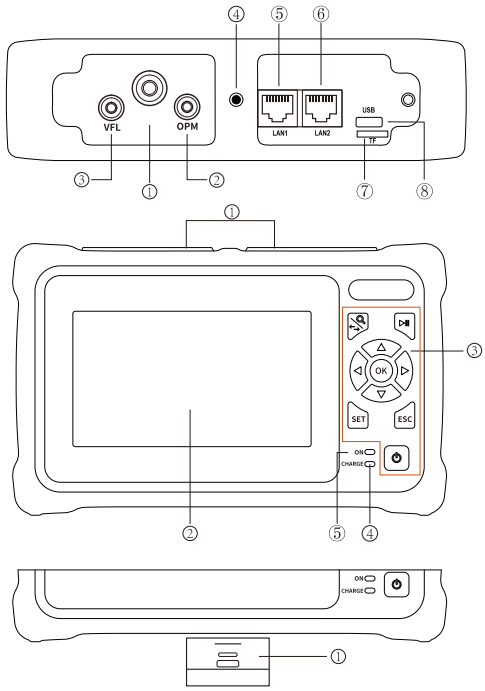
Rj45 Cable Sequeence

Testing Range	300 meters
Signal Type	Analog signal/Digital Signal
Active Cable Test	Not Support
Remote Unit	Can be took out from bottom of the device
Rj45 Cable Type	Support both 568A and 568B
Testing Time	Less than 15s

Rj45 Cable Length

Testing Range	300 meters
Signal Type	Analog signal/Digital Signal
Active Cable Test	Not Support
Testing Time	Less than 15s

Structure Drawings



Top

① OTDR/LS port
② OPM port
③ VFL port
④ Flashlight
⑤ RJ45 Cable Tracker port
⑥ RJ45 Sequence/Length port
⑦ TF card
⑧ Type C USB

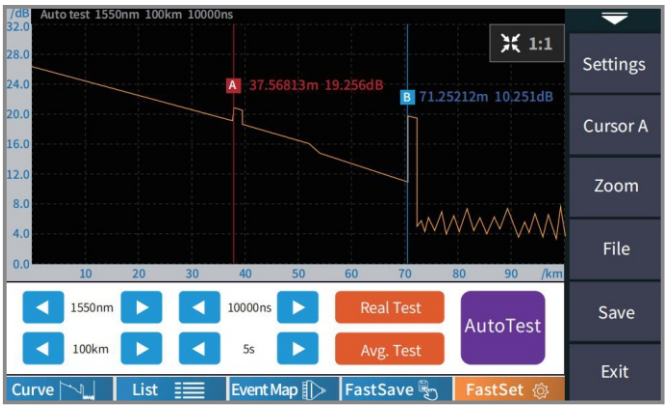
Main view

① Dust cover
② 4.3 inch color LCD
③ Function keys
④ Charging indicator
⑤ Power on status indicator

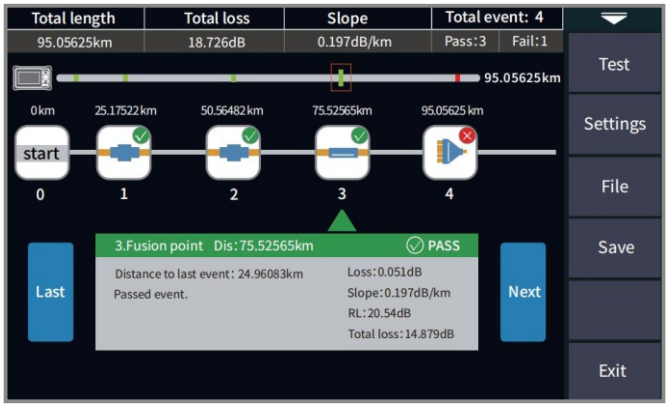
Bottom

①RJ45 Sequence test remote

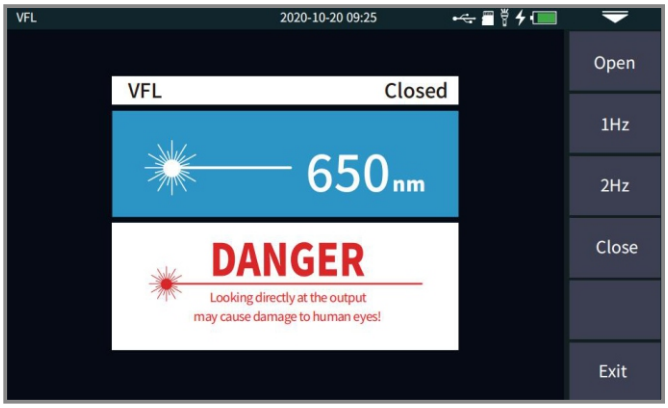
Functions Display



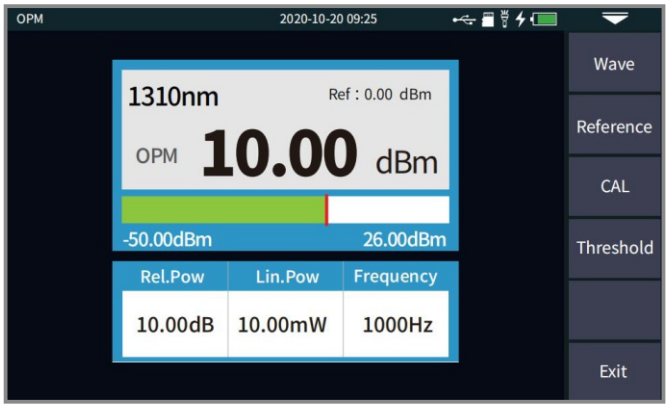
OTDR Curve



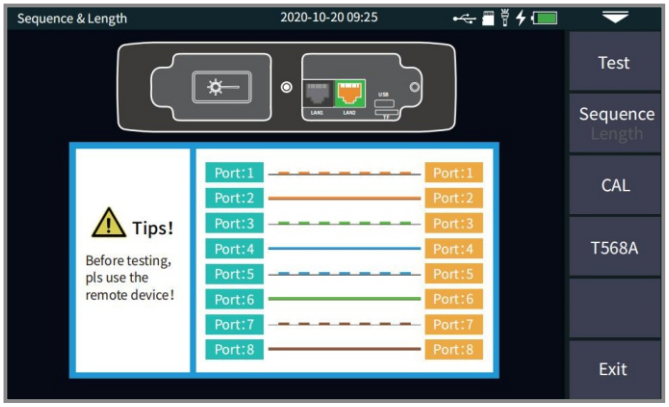
Event Map



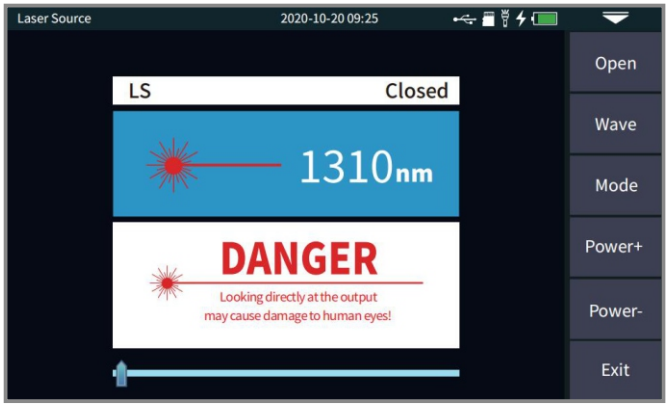
Visual Fault Locator



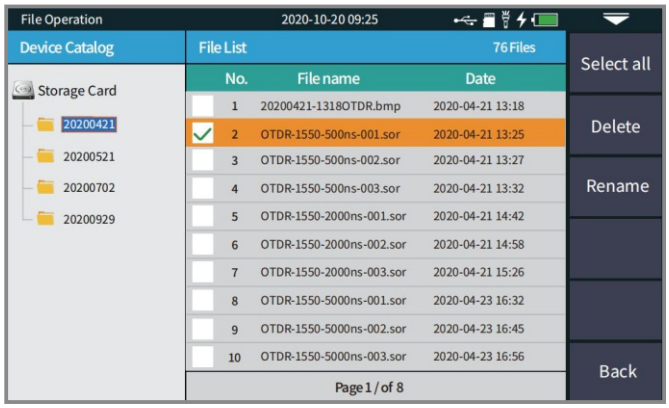
Optical Power Meter



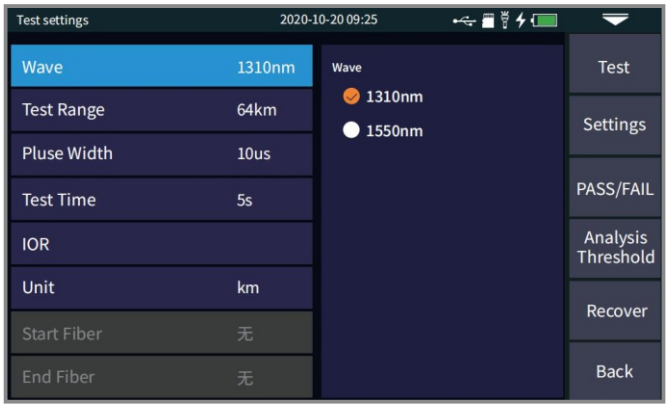
Rj45 Cable Testing



Stable Light Source



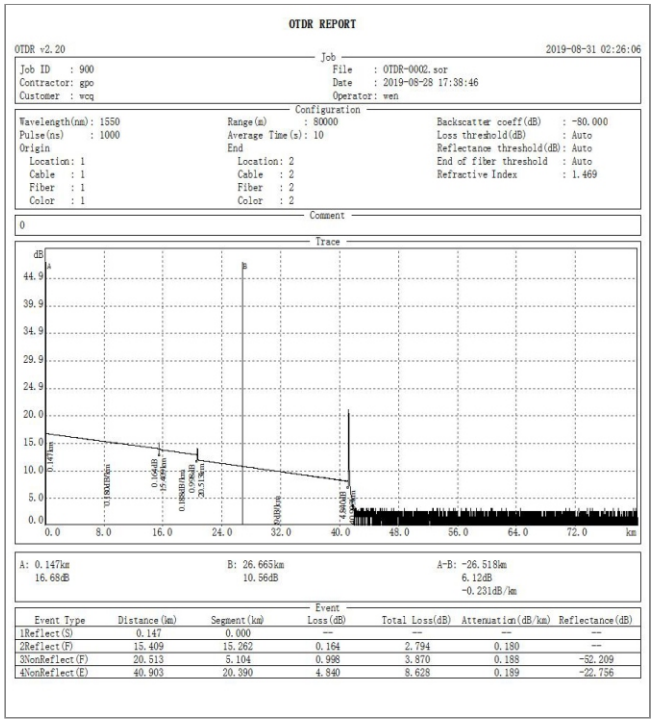
SOR and BMP Files Management



Parameter Setting

✶ Please visit the link for more pictures and video demo
www.firstfiber.cn/otdr-980mas.html

OTDR Report Printing



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 : Auto
Cable : 1 — Cable : 2 — Refractive Index : 1.469
Fiber : 1 — Fiber : 2
Color : 1 — Color : 2

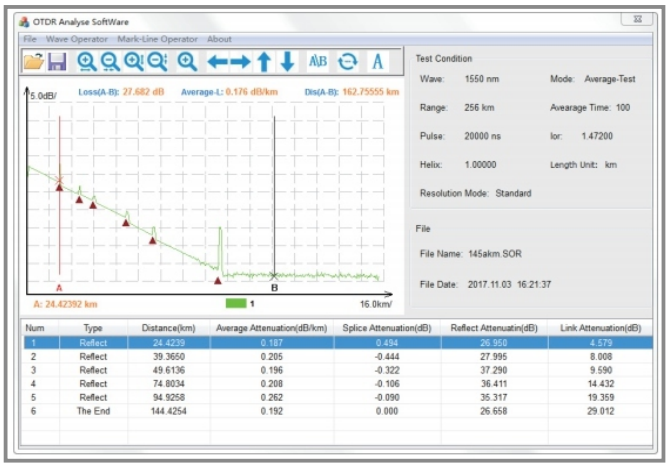
Comment
0

Trace

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

Event

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	4.940	8.628	0.189	-22.756

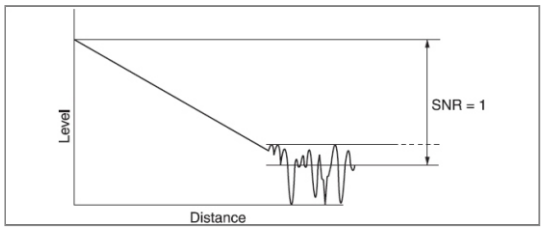


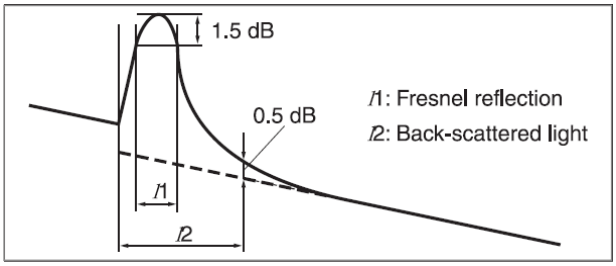
PC Software

Key Parameters Explaination

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.