

TN1700 MICRO OTDR

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



All Functions in One Device

- OTDR (Auto Test)
- OTDR (Average Test)
- OTDR (Real Time Test)
- Event Map
- Visual Fault Locator (VFL)
- Optical Power Meter (OPM)
- Optical Light Source (OLS)
- Loss Test
- LED Light
- NFC (optional)

Features

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

Configuration

Model#	Hot Sale			
	TN1700-D22	TN1700-P1	TN1700-P2	TN1700-A22
Wavelength	1310nm & 1550nm	1550nm	1610nm	1625nm
Dynamic Range	22/20dB	22dB	22dB	22dB
Testing Range	3m to 70km	3m to 70km	3m to 70km	3m to 70km
OTDR	√	√	√	√
Power Meter	√	√	√	√
Light Source	√	√	√	√
Visual Fault Locator	√	√	√	√
Loss Testing	√	√	√	√
LED Light	√	√	√	√
Event Map	√	√	√	√
1490nm Online	x	√	√	√
1550nm Online	x	x	√	√
1577nm Online	x	√	√	√

Request a Remote Demo
sales@FirstFiber.cn

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

*Note: TN1700-P2/A22 is with Filter 1490nm and 1577nm
The power of signal online >0dBm are not allowed*

General	
Size/Weight	175x105x45mm/ 450g (Battery included)
Display	3.5 inch touch-sensitive TFT Screen
Interface	1×USB, 1×SD port, 1×OTDR port, 1×VFL port, 1×Power Meter Port, 1×Charging Port
Power Supply	Input: 100V(ac) to 240V(ac), 50~60Hz, 0.8A; Output: 9V(DC), 2A 2000mAh/3.7V Lithium battery (with air traffic certification)
Working Time	Standby Time>10 hours
Power Saving	Back light: Common/Highlight/Power saving/Customized Auto power off: Never/1min/5min/10min/30min/60min
Data Storage	Internal Memory: 500 Curves, SD Card: 32GB (optional)
Language	English, Spanish, French, Italian, Portugal, Portuguese, German
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+50℃, ≤95% (non-condensation)

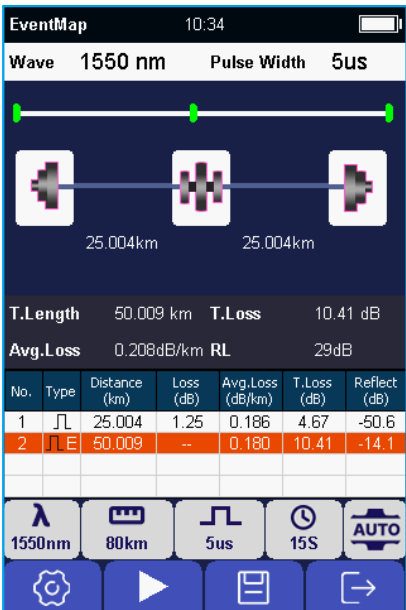
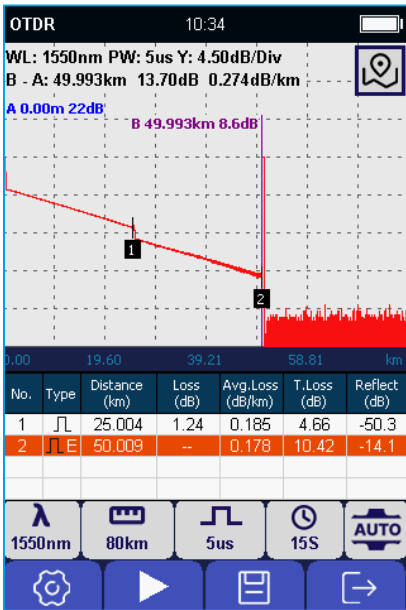
OTDR Module	
Pulse Width	5ns, 10ns, 20ns, 50ns, 100ns, 275ns, 500ns, 1μs, 2μs, 5μs, 10μs
Distance Range	100m, 500m, 1km, 2km, 5km, 10km, 20km, 40km, 60km, 80km
Sampling Resolution	Minimum 0.2m
Sampling Point	Maximum 64,000 points
Linearity	≤0.05dB/dB
Averaging Time	10s, 15s, 30s, Real Time, Customized
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	Auto, Customized
Loss Resolution	Auto, Customized
Distance Resolution	0.01m
IOR Setting	1.0~1.9, 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	850/1270/1300/1310/1490/1550/1577/1610/1625/1650nm
Test Range	-70~+ 10dBm, -50~+ 26dBm (optional)
Resolution	0.01
Accuracy	±0.35dB±1nW
Modulation	270/330/1k/2k Hz, Pi≥-40dBm

OLS Module	
Wavelength	Same as OTDR Wavelengths
Output Power	-5to +3dBm
Output mode	CW/270/1k/2k Hz

Functions Display



OTDR 10:57

Parameter Pass/Fail

Refraction

1310nm	1.4675
1550nm	1.4680

Loss Threshold

Auto 0.2

End Loss Threshold

Auto 10

Unit

km kfeet miles

Default Light Cal Back

System 10:38

Language

中文 English

Auto Poweroff

Never 2 Min 5 Min 10 Min

USB Connection

ON OFF

Time

2025 - 03 - 03 10 : 38

Version Upgrade Quit

OPM 10:36

1550nm CW

OPM -14.28dBm

Low Medium High

Linearity power	Reference power	Relative power
37.355uW	0.00dBm	-14.28dB

Shutdown Wavelength REF

Zero CAL Quit

LS 10:57

LS OFF

1310 nm

DANGER

Laser, don't direct at the eyes!

Start Wavelength Frequency

Quit

Loss Test 11:02

LS 1310 nm

OPM -60.81 dBm

Linearity power	Reference power	Relative power
0.830nW	-49.31dBm	-11.50dB

Start Wavelength REF

Zero Quit

VFL 10:36

VFL OFF

650 nm

DANGER

Laser, don't direct at the eyes!

CW 2Hz Shutdown

Quit

OTDR 09:54

WL: 1550nm PW: 100ns Y: 4.50dB/Div
B - A: 0.00m 0.00dB 0.000dB/km

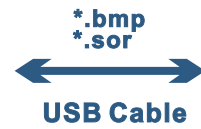
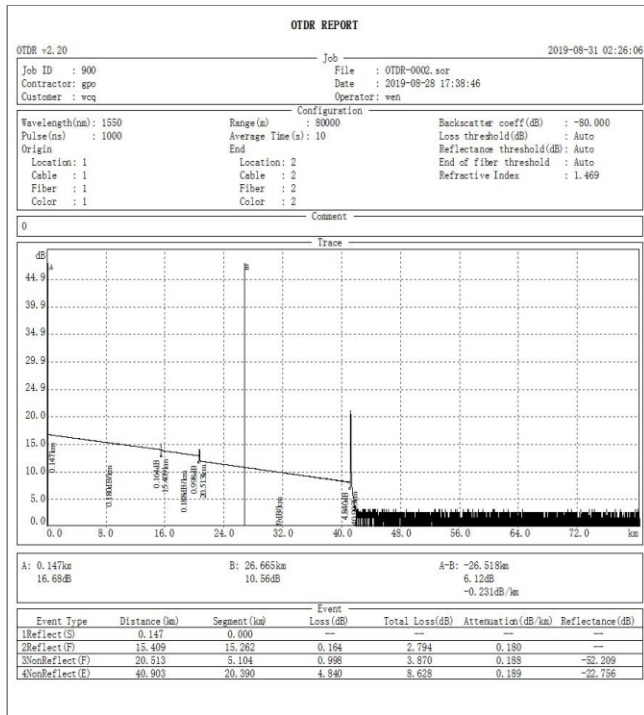
A 0.00m 8dB B 0.00m 8.1dB

File_1550nm_0001 Back < >

1	2	3	4	5	6	7	8	9	0
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g	h	j	k	l	Clr
Cap	z	x	c	v	b	n	m	-	.
DISK	SD	Space	Quit	Save					

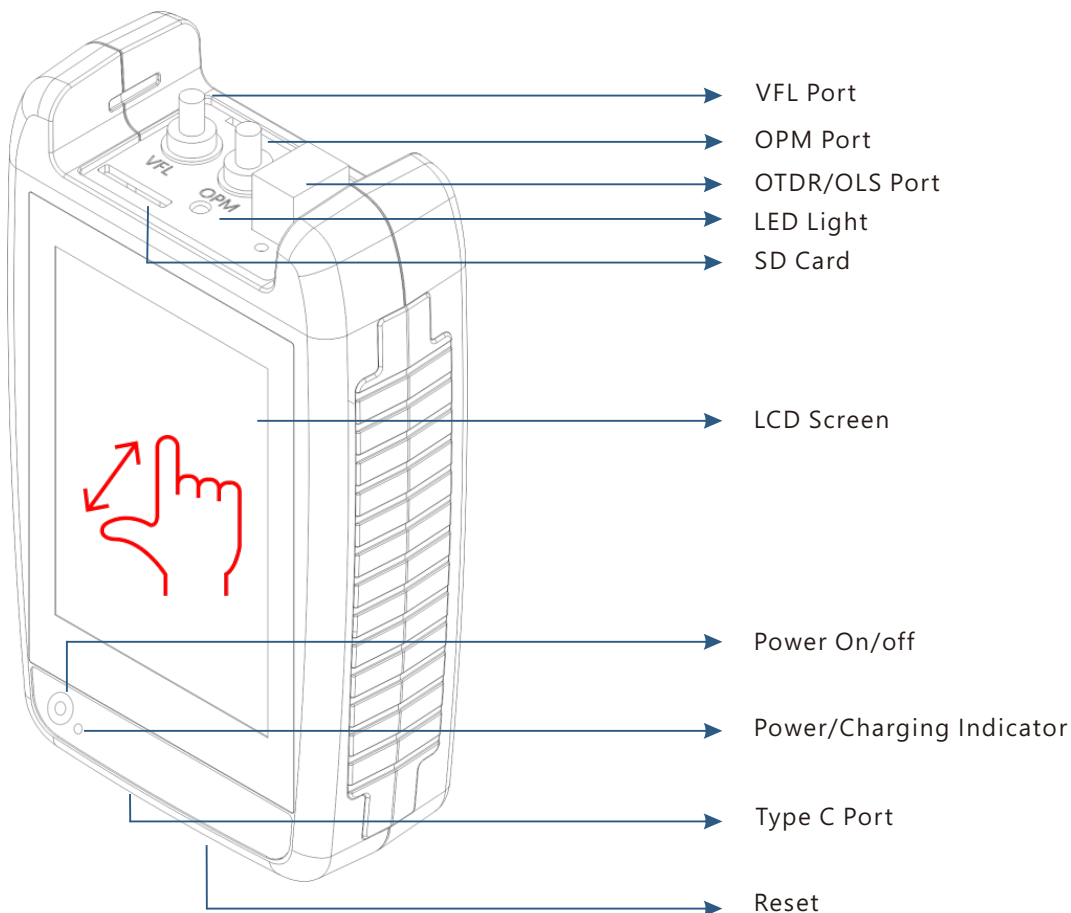
1550nm 80km 5us 15S AUTO

OTDR Report Printing



PC Software

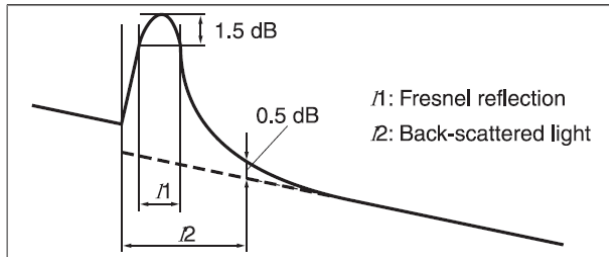
Drawings



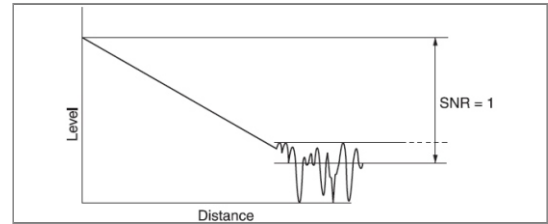
Key Parameters Explanation

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.



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



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

