

980TEK OTDR

High Precision, Android UI, Multi Touch,
and Ultra-stable for any Cable Testing Situations



High Resolution | High Brightness | 9-in-1 Device



- OTDR
- Event Map
- Optical Power Meter
- Optical Light Source
- Visual Fault Locator
- RJ45 Cable Tracking
- RJ45 Cable Sequence
- LED Light
- Bluetooth

Configuration

Model#	980TEK-D26	980TEK-P24	Hot Sale 980TEK-A24	980TEK-B24
Wavelength	1310nm & 1550nm	1610nm	1625nm	1650nm
Dynamic Range	26/24dB	24dB	24dB	24dB
Testing Range	3m to 100km	3m to 100km	3 to 100km	3m to 100km
OTDR	√	√	√	√
Event Map	√	√	√	√
Power Meter	√	√	√	√
Light Source	√	√	√	√
Visual Fault Locator	√	√	√	√
LED Light	√	√	√	√
RJ45 Cable Sequence	√	√	√	√
RJ45 Cable Tracking	√	√	√	√
Bluetooth*	√	√	√	√
1490nm Online	x	√	√	√
1550nm Online	x	√	√	√
1610nm Online	x	x	√	√

Request a Remote Demo
tech@FirstFiber.cn

The Kit Includes: OTDR, User Manual,
TF Card, OTDRviewer Software, Power Charging Adapter,
USB Cord, Carrying Case, Certificate of Calibrate
* Bluetooth function is optional

Note: -P24(1610nm) can test the fiber with 1310/1490/1550nm signal in (power <0dBm)
-A24(1625nm) can test the fiber with 1310/1490/1550/1577nm signal in (power <0dBm)
-B24(1650nm) can test the fiber with 1310/1490/1550/1577nm signal in (power <5dBm)

General	
Size/Weight	145x86x33mm/ 400g (Battery included)
Display	4.3 inch touch-sensitive IPS TFT Screen, 800x480 Resolution
Interface	Type-C USB, TF Card Port, Rj45 Port, OTDR port, VFL port, Power Meter Port
Power Supply	Input: 100V(ac) to 240V(ac), 50~60Hz, 0.6A; Output: 5V(DC), 2A 4000mAh/5V Lithium battery (with air traffic certification)
Working Time	>8 hours
Power Saving	Intelligent power management Auto power off: Never/1min/5min/10min/30min/60min
Data Storage	8GB
Language	English
Environmental Conditions	Operating temperature and humidity: -10°C~+50°C, ≤95% (non-condensation) Storage temperature and humidity: -20°C~+70°C, ≤95% (non-condensation)

OTDR Module	
Pulse Width	5ns, 10ns, 20ns, 30ns, 50ns, 80ns, 100ns, 200ns, 300ns, 800ns, 1μs, 2μs, 5μs, 10μs, 20μs
Distance Range	100m, 300m, 500m, 1.25km, 2.5km, 5km, 10km, 20km, 40km, 80km, 100km
Sampling Resolution	Minimum 0.03m
Sampling Point	20,000 points
Linearity	≤0.05dB/dB
Averaging Time	Setting by user
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	0.2dB
Loss Resolution	0.01dB
Distance Resolution	0.01m
IOR Setting	1.00000~2.00000
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

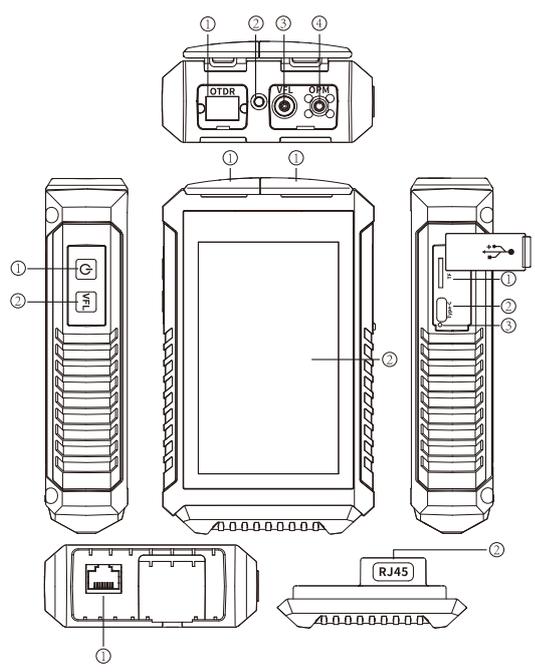
OPM Module	
Wavelength	850/980/1300/1310/1490/1550/1625/1650nm
Test Range	-70~+ 10dBm or -50~+ 26dBm (in default)
Resolution	0.01
Accuracy	±0.35dB±1nW
Modulation	270/330/1k/2k Hz, Pi≥-40dBm

OLS Module	
Wavelength	Same as OTDR Wavelengths
Output Power	>-5dBm
Output mode	CW/270/330/1k/2k Hz

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 Sequence	
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

Structure Drawings



Front View

- ① Dust cover
- ② 4.3 inch color LCD

Top

- ① OTDR/LS interface
- ② Flashlight
- ③ VFL interface
- ④ OPM interface

Left

- ① Power on/off
- ② VFL

Offside

- ① TF(Micro SD) card slot
- ② Type C USB
- ③ LED charging indicator light

Bottom

- ① RJ45 wire sequence/tracker interface
- ② RJ45 testing remote end

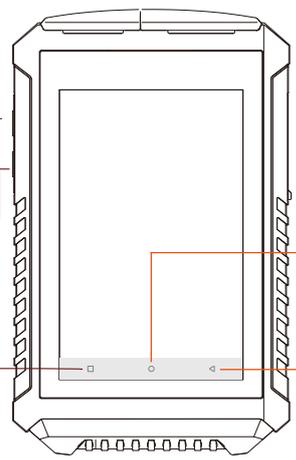
On/Off key
Short press to turn on and prompt to turn off, long press to directly turn off

VFL key
ON/OFF

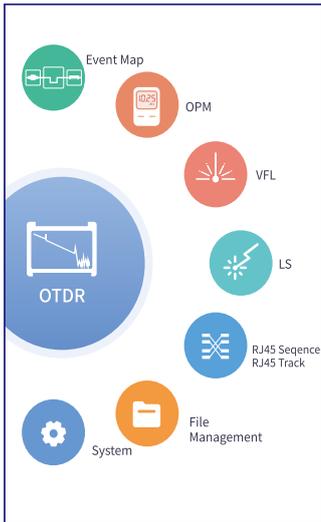
Quick function keys
Bluetooth switch, flashlight switch, voice switch USB switch, backlight brightness adjustment, screenshot

Home key
Short press to return to the main menu interface

Exit button
Return to the previous menu level



Functions & Settings



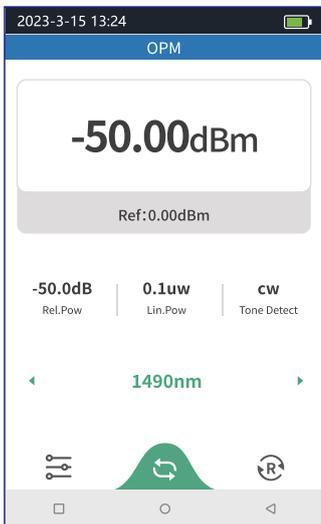
All Functions



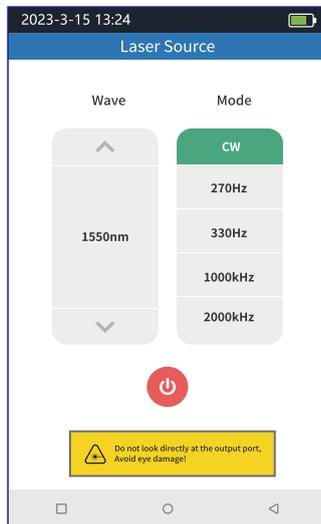
OTDR



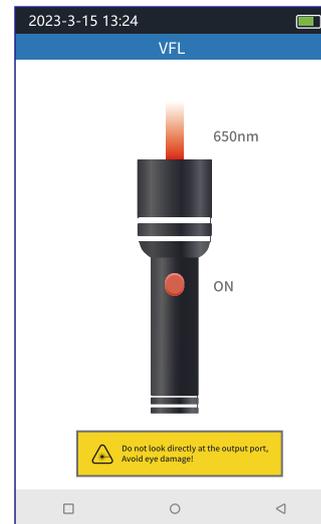
Event Map



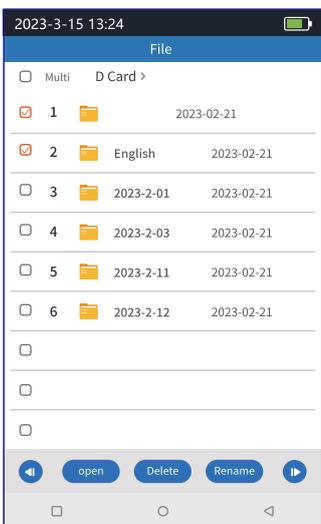
Optical Power Meter



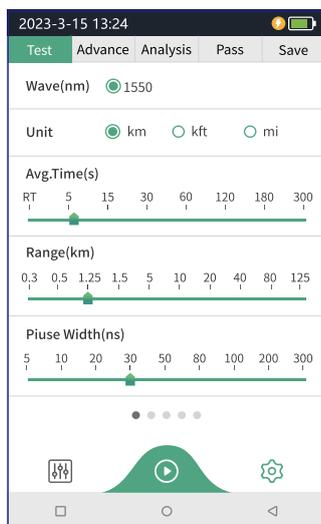
Optical Light Source



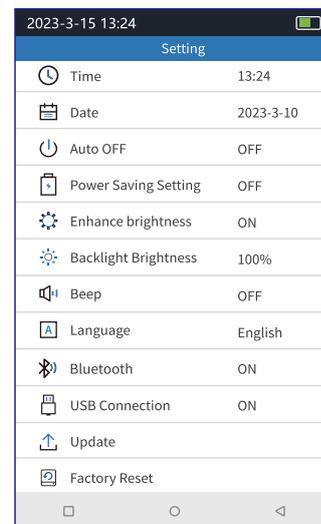
Visual Fault Locator



File



OTDR Test Setting



System Setting

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

OTDR Report Printing

OTDR REPORT 2019-08-31 02:26:06

OTDR v2.20 Job ID : 900 File : OTDR-0002.sor
 Contractor : gpo Date : 2019-08-28 17:38:46
 Customer : wq Operator : wen

Configuration

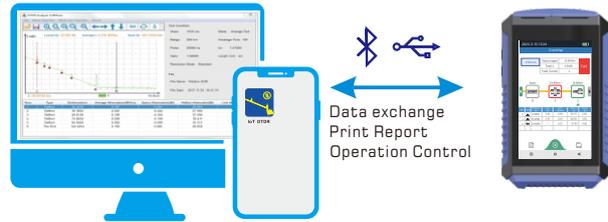
Wavelength(nm) : 1550	Range (m) : 80000	Backscatter coeff(dB) : -80.000
Pulse(ns) : 1000	Average Time(s) : 10	Loss threshold(dB) : Auto
Origin : Location : 1	End : Location : 2	Reflectance threshold(dB) : Auto
Cable : 1	Fiber : 2	End of fiber threshold : Auto
Fiber : 1	Fiber : 2	Refractive Index : 1.469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

Trace

Summary

A: 0.147km	B: 26.665km	A-B: -26.518km
16.65dB	10.56dB	6.12dB
		-0.221dB/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(F)	40.903	20.390	4.940	8.828	0.189	-28.736



OTDR Analyse Software

Wave Operator Mark-Line Operator About

Test Condition

Wave: 1550 nm	Mode: Average-Test
Range: 256 km	Average Time: 100
Pulse: 20000 ns	Ior: 1.47200
Helix: 1.00000	Length Unit: km
Resolution Mode: Standard	

File Name: 145akm SOR
File Date: 2017.11.03 16:21:37

Num	Type	Distance(km)	Average Attenuation(dB/km)	Splice Attenuation(dB)	Reflect Attenuation(dB)	Link Attenuation(dB)
1	Reflect	24.4232	0.187	-0.424	26.953	4.575
2	Reflect	39.3650	0.205	-0.444	27.955	8.008
3	Reflect	49.6136	0.196	-0.322	37.290	9.590
4	Reflect	74.8034	0.208	-0.106	36.411	14.432
5	Reflect	94.9258	0.262	-0.090	35.317	19.359
6	The End	144.4254	0.192	0.000	26.658	29.012

PC Software

IoT OTDR (Bluetooth & GPS)

FF_1310

Length: 33.47km Grand Total: 0.0000dB
 A-B Distance: 0.0000km A-B Loss: 0.0000dB A-B Attenuation: 0.0000dB/km

Auto 1310nm 33.467km 3ms
 A: 4.130000km, 21.68dB
 B: 0.000000km, 25.95dB

DANGER
Please do not look directly at the laser exit

FF_1310(1)

Test Condition

Test Mode: Auto
 Wave Length: 1310nm
 Range: 33.5km
 Pulse Width: 800ns
 IOR: 1.4677
 Test Time: 2023-03-19 16:00:23

Test Result

Length: 13.06km
 Total Loss: 7.51dB
 Average Loss: 0.575dB/km

Event Count: 4 Pass Fail

No	Type	Distanc	Loss(dB)	Attenuati	Return	Link
				on(dB)	Loss(dB)	Loss(dB)
0/3		0.00000	0.0000	---	-52.6691	0.0000
		2.002	0.67	0.337	---	0.67
1/3		2.002	0.33	---	-45.1136	1.01
		1.011	0.39	0.381	---	1.39
2/3		3.013	2.78	---	-54.6909	4.17
		10.000	3.35	0.333	---	7.51

FF_1310(1)

Event START Distance: 0.0000m Event Loss: --- Reflectance: -15.468dB Link Loss: ---

Event 1 Distance: 2.0020m Event Loss: 0.332dB Return Loss: -45.1136dB Link Loss: 1.0098m

Event 2 Distance: 3.0130m Event Loss: 2.7798dB Return Loss: -54.6910dB Link Loss: 4.1640m

Event END Distance: 13.0600m



Mobile Phone App



Operation Video