

FC1500 Fiber & Copper Tester

High-speed Processor for Smooth Control

Integrated Multi Modules in One Device to Meet Fiber and Copper Test Requirement



Configuration

Model#	Hot Sale			
	FC1500-D26	FC1500-P24	FC1500-A24	FC1500-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

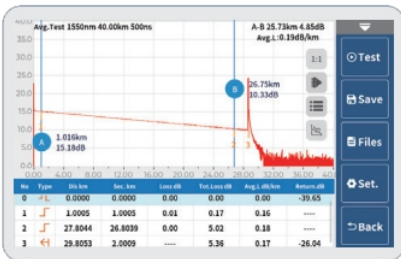
Note: -P24(1610nm) can test the fiber with 1310/1490/1550nm signal in (power <0dBm)
 -A24(1625nm) can test the fiber with 1310/1490/1550/1577nm signal in (power <0dBm)
 -B24(1650nm) can test the fiber with 1310/1490/1550/1577nm signal in (power <5dBm)

Highlights



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



Advance Parameters

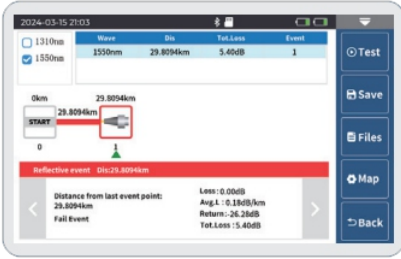
Sampling: Normal High

Unit: km kft mi

Refractive index: 1.550nm 1.46832

Start cable(km): 0.0000

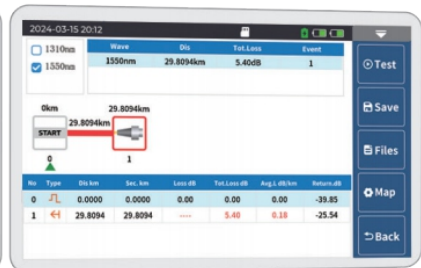
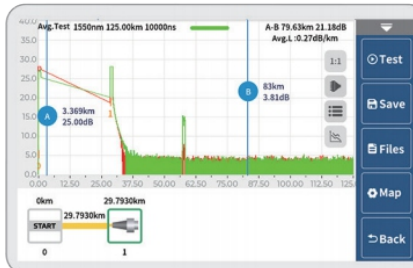
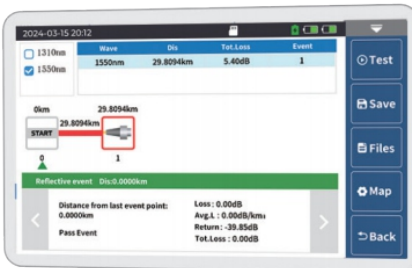
End cable(km): 0.0000



- Launch Cable can be Added or Deducted from OTDR Curves
- Support Pass/Fail threshold Settings

3 Modes to Display Test Results

- OTDR Curve
- Event Map
- List



General	
Size/Weight	189x115x43mm/ 600g (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 5000mAh/3.7V 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, >200,000 Curves
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	3ns,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,125km, 260km
Sampling Resolution	Minimum 0.03m
Sampling Point	>160,000 points
Linearity	≤0.05dB/dB
Loss Test Method	4 point/5 point Method
Real Time Refresh	3Hz (Typical Rate)
Distance Accuracy	±(1m+measuring distance×3×10 ⁻⁵ +sampling resolution) (excluding IOR uncertainty)
Loss Threshold	0.2dB
Loss Resolution	0.001dB
Distance Resolution	0.001m
IOR Setting	1.00000~2.00000
Units	km, mi, kft
OTDR Trace Format	SOR

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

OPM Module	
Wavelength	850/1270/1300/1310/1490/1550/1577/1625/1650nm
Test Range	-70~+ 10dBm or -50~+ 26dBm (in default)
Resolution	0.01dB
Accuracy	±5%
Connector	Universal

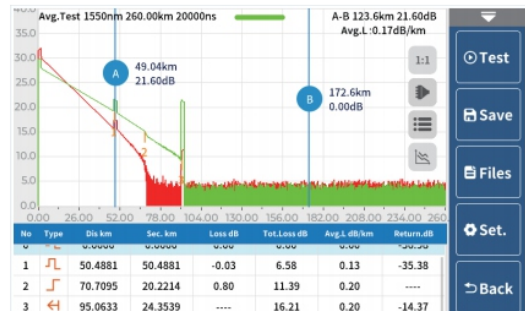
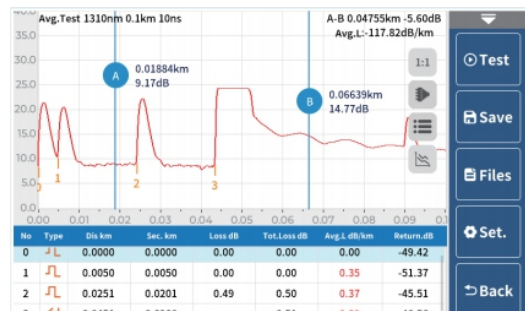
OLS Module	
Wavelength	Same as OTDR Wavelengths
Output Power	>-5dBm
Output mode	CW/270/330/1k/2k Hz

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

Advantages

- Multi Curves Displayed in One Screen for Easy Comparison and Analysis
- Dual Wavelengths (1310nm/1550nm) Measurement Simultaneously
- Dynamic Range & Wavelengths can Be Customized



OTDR Report Printing

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

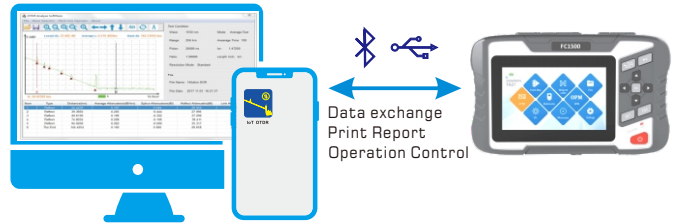
Job ID : 900 File : OTDR-0002.sor
 Contractor : gpo Date : 2019-08-28 17:38:46
 Customer : wq Operator : wen

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 Location : 2 Reflectance threshold(dB) : Auto
 Cable : 1 Cable : 2 End of fiber threshold : Auto
 Fiber : 1 Fiber : 2 Reflective Index : 1.469
 Color : 1 Color : 2

Trace

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



OTDR Analyse Software

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	24.4236	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
 0.0000km 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	0.00000
		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: -15.466dB Link Loss: ---

Event 1 Distance: 2.0020m Event Loss: 0.332dB Return Loss: -45.1136dB Link Loss: 1.0090m

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

Event END Distance: 13.0550m



Mobile Phone App



Operation Video

Because of Apple Store Policy, we can not guarantee the App is available in any countries. Please contact our sales or visit www.IoT-OTDR.com/iot-otdr/ios.php