



Ascentac OTDR 700C Series, Optical Time Domain Reflectometer, utilizes optical fiber backscattering Rayleigh scattering technology to assess the condition of fiber optic networks.

# Optical Time Domain Reflectometer

## Ascentac OTDR700C

The Smart Multi-Pulse Measurement Method Enables Fiber Link Testing Without Interrupting Live Signal Transmission, Offering Greater Flexibility and Efficiency in Use

### | Feature

- Smart View
- In-service testing
- Multi-function in one
- Ethernet cable testing
- USB Type-C charging

### | Application

- Telecom maintenance
- CATV maintenance
- Optical fiber testing
- Other fiber optic maintenance

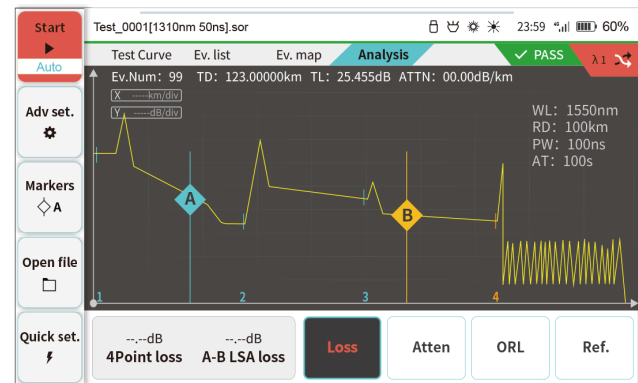
## Description

The analysis results are presented through graphical displays and event tables, including connector reflection events, fiber microbending non-reflection events, and fiber breakages. It accurately calculates fiber length and loss values. It features a touch-screen color display and buttons, offering users flexibility and ease of operation.

Additionally, it functions as a multifunctional optical meter, integrating a stable light source, optical power meter (OPM), and visible fault locator (VFL). It is ideal for on-site maintenance and troubleshooting, consolidating multiple functions into one device, eliminating the need for additional test equipment.

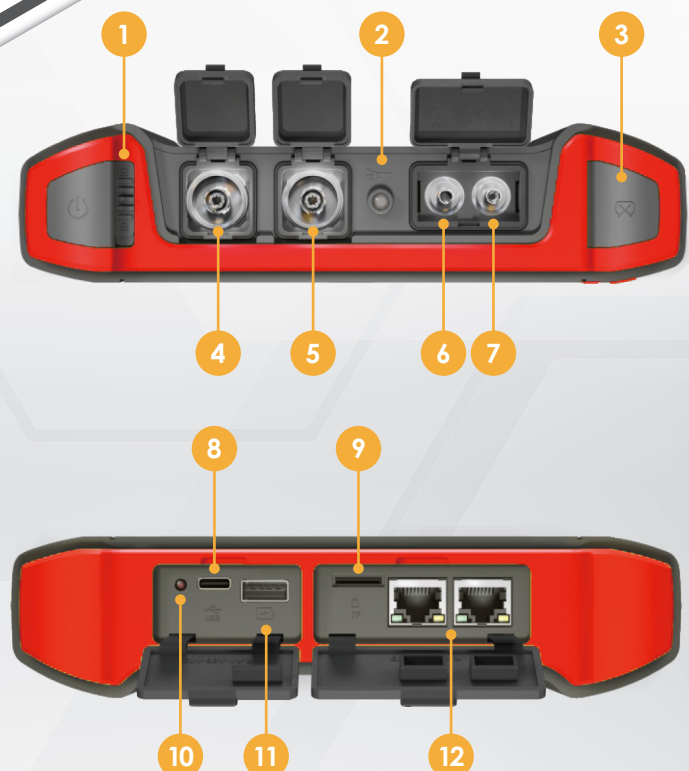
## OTDR Pro

OTDR Pro is designed for experienced users, allowing them to define parameters for segments, such as loss, attenuation, return loss, and reflectance.



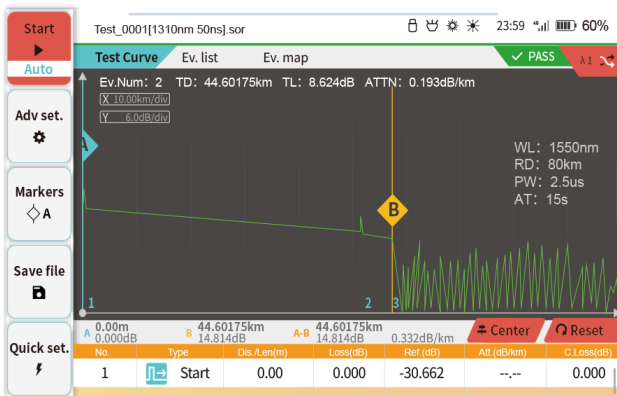
## Appearance

- 1 Anti-mistouch power switch
- 2 LED flashlight
- 3 Screenshot
- 4 OTDR connector
- 5 OTDR connector
- 6 OPM connector(1625nm)
- 7 VFL connector
- 8 Type-C charging
- 9 TF card
- 10 Charging indicator
- 11 USB-A connector
- 12 RJ45 sequence connector



## Auto OTDR

Using the Auto OTDR function simplifies testing; just select the wavelength and time, and the measurement completes on its own.



Start

Auto

Adv set.

Markers

Open file

Quick set.

Test\_0001[1310nm 50ns].sor

Test Curve

Ev. list

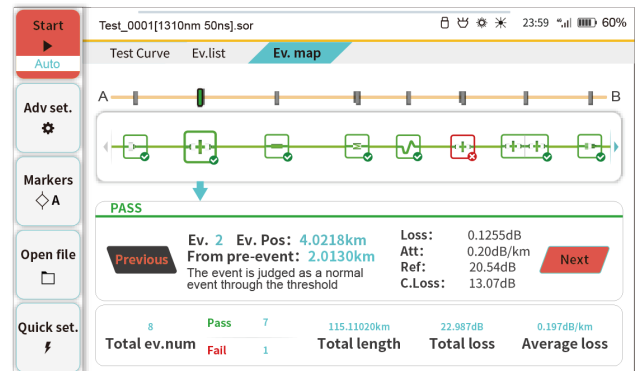
Ev. map

Ev.Num: 2    TD: 406.75m    TL: 0.109dB    ATTN: 0.267dB/km

✓ PASS

λ 1

No.	Type	Dis./Len(m)	Loss(dB)	Ref.(dB)	Att.(dB/km)	C.Loss(dB)
1	Start	0.00	0.000	-47.884	---	0.000
	Section	(406.75)	0.109	---	0.267	0.109
2	End	406.75	---	-23.710	---	0.109



Left Side



Front



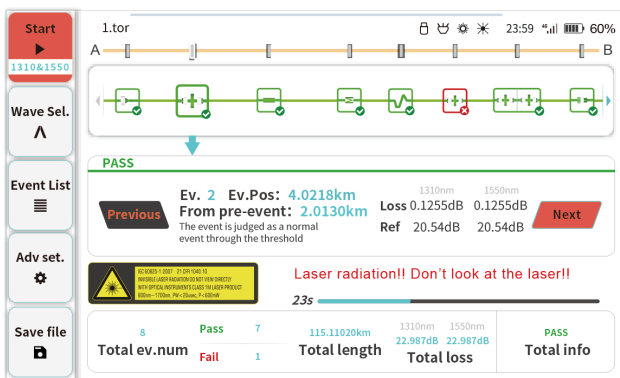
Back



Right side

## Smart View

Traditional OTDRs operate with a fixed pulse width, which limits both resolution and dynamic range. Smart View performs measurements using multiple pulse widths over time and merges the results into a single trace. This method resolves the limited dynamic range of narrow pulses and reduces the large dead zones introduced by wider pulses.



Start

1310&1550

Wave Set.

^

Event List

☰

Adv set.

⚙

Open file

📁

1.tor

🔍

🔊

⚙

🌐

23:59

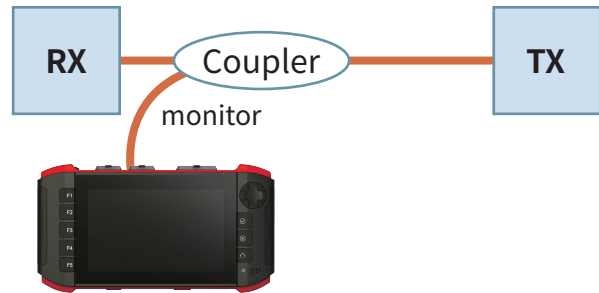
📶

60%

No.	Type	Dis./Len(m)	Loss(dB)		Ref(dB)	
			1310nm	1550nm	1310nm	1550nm
1	Start	0.00	0.000	0.000	---	---
2	Section	15.16	---	---	---	---
	Reflect	15.16	0.550	0.470	-35.246	-37.917
3	Section	60.07	2.999	---	---	---
3-1	End	75.23	---	---	-20.852	-24.442
3-1	Reflect	75.16	---	---	---	---
3-2	End	84.42	---	---	---	---

## In-Service Testing

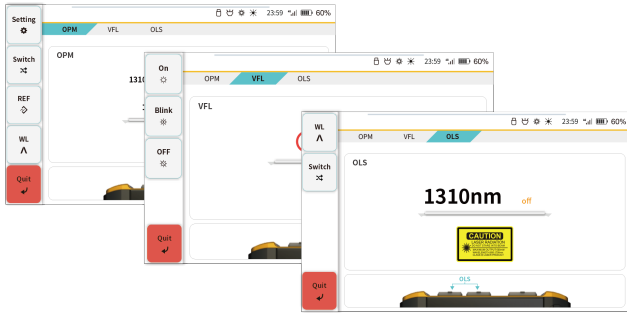
When a fiber link requires fault isolation or maintenance, an OTDR with in-service testing capability allows technicians to perform measurements without disrupting live signal transmission. This improves diagnostic efficiency, shortens response time, and minimizes service downtime.





## Optical Multi-Meter (OMM)

This multi-function meter integrates a stable light source, optical power meter, and VFL, enabling concurrent optical loss measurement by using its light source and optical power meter.



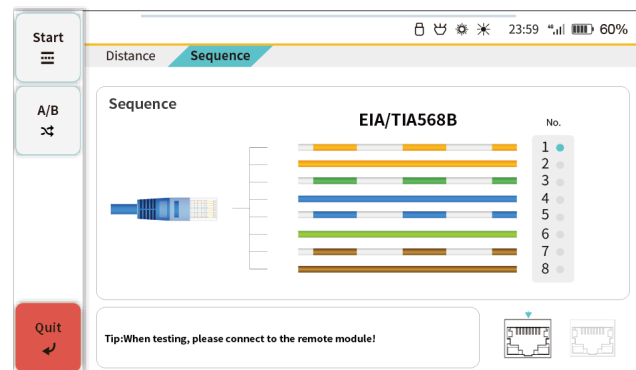
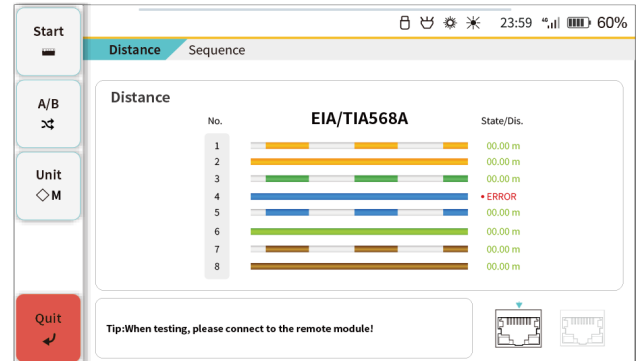
## RJ45 Tracker

Using a tone probe, a regular beeping alert sounds as the probe nears the target network cable.



## RJ45 Mapper

Pair this with a network tester to verify the network cable pinout and detect wiring faults like miswires or opens.



## Specification

OTDR					
Wavelength (nm)	1310 ± 20	1550 ± 20	1610 ± 3	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20 1625 ± 3
Dynamic Range (dB)	22 / 26 / 32 (Select one)	20 / 24 / 30 (Select one)	20 / 24 / 30 (Select one)	32/30	32/30/30
Pulse Width(ns)	5 to 20000				
Test Mode	Average, real-time and auto				
Event Dead Zone(m)	2				
Attenuation Dead Zone (m)	8				
Sampling Point	16000				
Distance Accuracy (m)	± (0.8 + 0.005% × distance + Sampling Resolution)				
Test Distance(km)	0.1 to 150				
In-service Testing	N/A	N/A	Applicable	N/A	Applicable to 1625nm only
Storage (SOR)	500				
OTDR/OLS Connector	FC/UPC; SC/UPC; FC/APC; SC/APC (Optional)				

OPM Specification		
Power Range	-70 to +8	-50 to +26
Uncertainty (dB)	≤± 0.2	
Resolution (dB)	0.01	
Wavelength Range (nm)	850,980,1270,1300, 1310,1490,1550,1577, 1625,1650	
Optical Connector	Universal 2.5mm	

VFL Specification	
Wavelength (nm)	650 ± 10
Output Power (mW)	1 or 10 (Optional)
Modulation Output	CW (Continuous Wavelength), pulsed (2Hz)
Optical Connector	Universal 2.5mm

Display	
5-inch high-definition touch screen Resolution 800X480	

Others	
Power Bank Function	1.USB-A 2.5V / 2A
Ethernet Cable Testing	1.Cable Tracing 2.Cable Mapping 3.Signal Detection

Power	
Battery Capacity (mAh)	5000
Battery Life (hours)	Standby > 9 Test > 5
Power Input	1.Type-C 2.5V / 2A

Environment	
Working Temperature (°C )	0 to +50
Storage Temperature (°C )	-20 to 70
Relative Humidity (%)	5 to 90, Non-condensing

Dimension and Weight	
L x W x H (mm)	190 x 100 x 45
Weight (g)	500

Standard Accessories	
Main unit, Network cable tester, Carrying bag, 1-year warranty.	

## Ordering Information

### OTDR

OTDR 01-0X7XXC + A1-030X4 + A1-01X04

#### Wavelength

A: Single wavelength  
B: Dual wavelength  
C: Triple wavelength

#### Wavelength & Dynamic Range

##### A: Single Wavelength

01: 1310nm, 22dB  
02: 1310nm, 26dB  
03: 1310nm, 32dB  
04: 1550nm, 22dB  
05: 1550nm, 26dB  
06: 1550nm, 32dB  
07: 1610nm, 22dB  
08: 1610nm, 26dB  
09: 1610nm, 32dB

##### B: Dual Wavelength

03: 1310/1550nm, 32/30dB

##### C: Triple wavelength

03: 1310/1550/1625nm, 32/30/30dB

#### Output Power (VFL)

6: 1mW  
7: 10mW

#### Power Range (OPM)

3: +8 to -70 dBm  
4: +26 to -50 dBm

### Optical Connector

A0-0014X

#### OTDR

5: SC/UPC  
6: FC/UPC

**Note:** 1. VFL and OPM with built-in universal 2.5mm tip sleeve.

### Network Cable Tester

NCT 01-00650

**Example:** OTDR 01-0B703C + A1-03044 + A1-01704 + A0-00145 + NCT 01-00650



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