

# **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 testina
- USB Type-C charging

#### Application

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

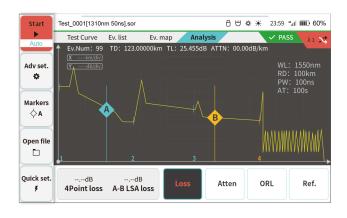
### Description

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.

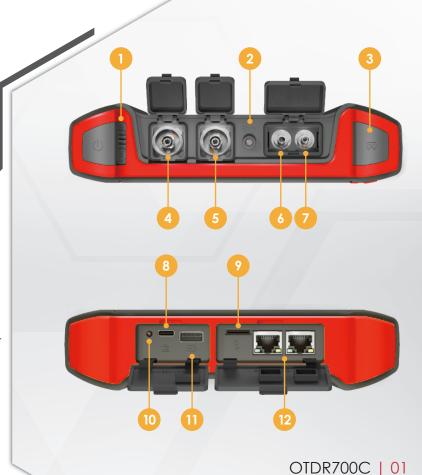
#### OTDR Pro

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



## Appearance

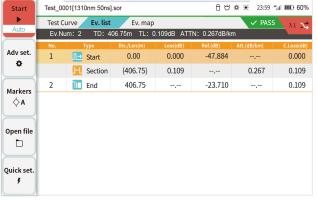
- 1 Anti-mistouch power switch
- 2 LED flashlight
- 3 Screenshot
- 4 OTDR connector
- OTDR connector
- 6 OPM connector(1625nm)
- VFL connector
- 8 Type-C charging
- TF card
- Charging indicator
- USB-A connector
- 12 RJ45 sequence connector

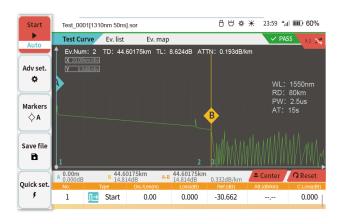


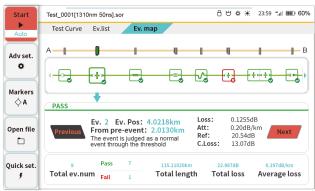
#### Auto OTDR

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







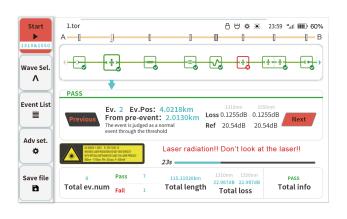


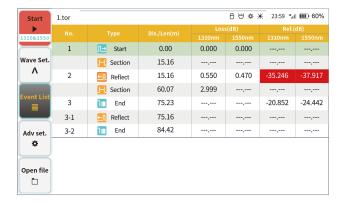




#### Smart View

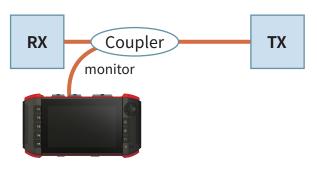
Traditional OTDRs operate with a fixed pulse width, which limits both resolution and dynamic range. Smart View performs measurements using multiple pulse widths over time and merges the results into a single trace. This method resolves the limited dynamic range of narrow pulses and reduces the large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





### In-Service Testing

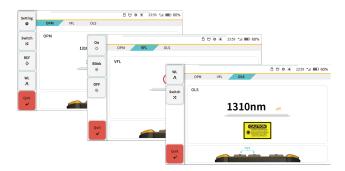
When a fiber link requires fault isolation or maintenance, an OTDR with in-service testing capability allows technicians to perform measurements without disrupting live signal transmission. This improves diagnostic efficiency, shortens response time, and minimizes service downtime.





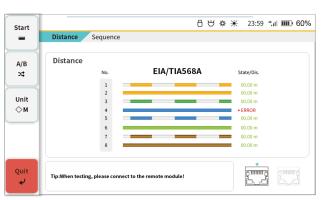
#### Optical Multi-Meter (OMM)

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.



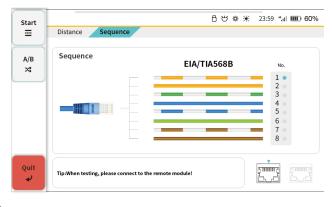
#### RJ45 Mapper

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



#### RJ45 Tracker

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







## | Specification

OTDR					
Wavelength (nm)	1310 ± 20	1550 ± 20	1610 ± 3	1310 ± 20 1550 ± 20	$1310 \pm 20$ $1550 \pm 20$ $1625 \pm 3$
Dynamic Range (dB)	22 / 26 / 32 (Select one)	20 / 24 / 30 (Select one)	20 / 24 / 30 (Select one)	22/20 26/24 32/30 (Select one)	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)	$\pm$ (0.8 + 0.005% $ imes$ 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	otical 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				

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5-inch high-definition touch screen Resolution 800X480

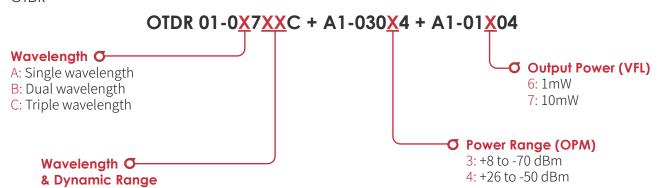
Others			
Power Bank Function	1.USB-A 2.5V / 2A		
Ethernet Cable Testing	1.Cable Tracing 2.Cable Mapping 3.Signal Detection		

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** 



#### 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

01: 1310/1550nm, 22/20dB

02: 1310/1550nm, 26/24dB

03: 1310/1550nm, 32/30dB

#### C: Triple wavelength

01: 1310/1550/1625nm, 22/20/20dB

02: 1310/1550/1625nm, 26/24/24dB

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

**Optical Connector** 



**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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