



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

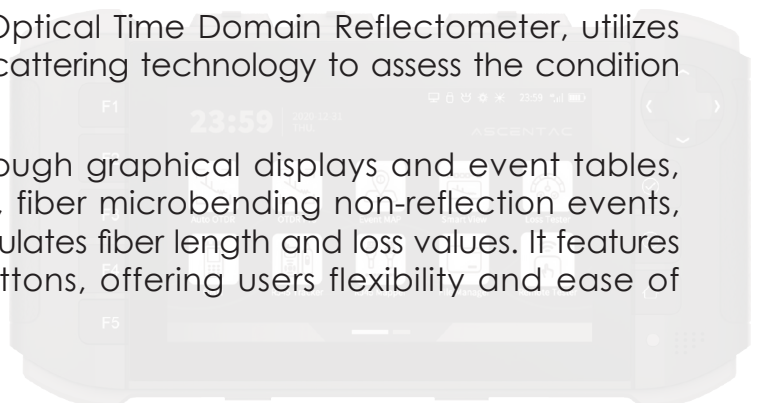
| Application

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

| Introduction

Ascentac FiberGo OTDR700C Series, Optical Time Domain Reflectometer, utilizes optical fiber backscattering Rayleigh scattering technology to assess the condition of fiber optic networks.

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.

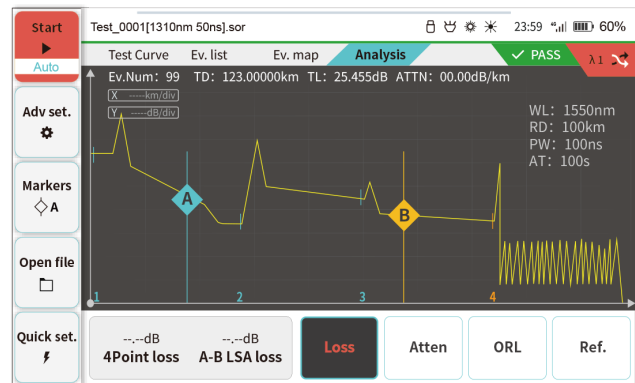


Description

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.

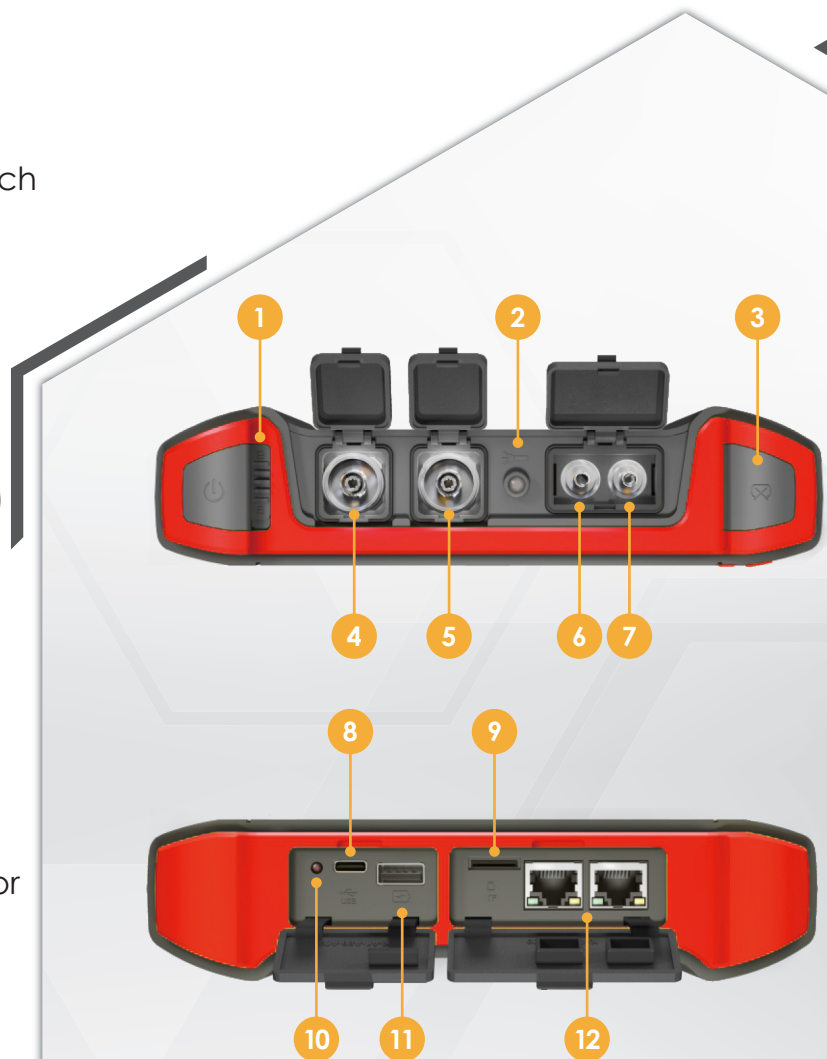
OTDR Pro

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 Test_Curve Ev. list Ev. map 23:59 60%

Auto Test Curve Ev. list Ev. map ✓ PASS λ1

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

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

Adv set. Markers Open file Quick set.

Start Test_Curve Ev. list Ev. map 23:59 60%

Auto Test Curve Ev. list Ev. map ✓ PASS λ1

Ev.Num: 2 TD: 44.60175km TL: 8.624dB ATTN: 0.193dB/km

WL: 1550nm
RD: 80km
PW: 2.5us
AT: 15s

No.	Type	Dis./Len(m)	Loss(dB)	Ref.(dB)	Att.(dB/km)	C.Loss(dB)
1	Start	0.00	0.000	-30.662	--	0.000

Adv set. Markers Save file Quick set.

Start Test_Curve Ev. list Ev. map 23:59 60%

Auto Test Curve Ev. list Ev. map

Adv set. Markers Open file Quick set.

PASS

Ev. 2 Ev. Pos: 4.0218km
From pre-event: 2.0130km
The event is judged as a normal event through the threshold

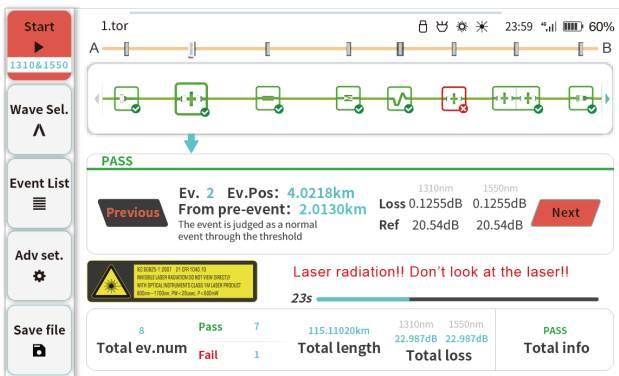
Loss: 0.1255dB
Att: 0.20dB/km
Ref: 20.54dB
C.Loss: 13.07dB

Total ev.num: 8 Pass 7 Fail 1
Total length: 115.11020km
Total loss: 22.987dB
Average loss: 0.197dB/km



Smart View

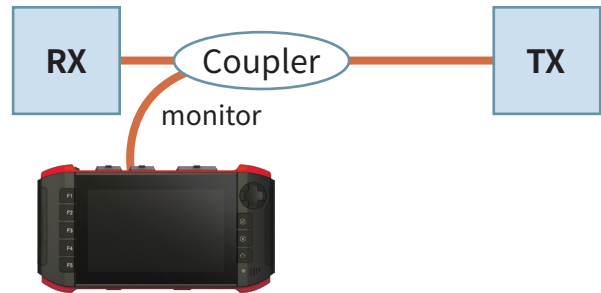
Traditional OTDRs operate with a fixed pulse width, which limits both resolution and dynamic range. Smart View performs measurements using multiple pulse widths over time and merges the results into a single trace. This method resolves the limited dynamic range of narrow pulses and reduces the large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



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	---	---	---	---
2	Reflect	15.16	0.550	0.470	-35.246	-37.917
3	Section	60.07	2.999	---	---	---
3	End	75.23	---	---	-20.852	-24.442
3-1	Reflect	75.16	---	---	---	---
3-2	End	84.42	---	---	---	---

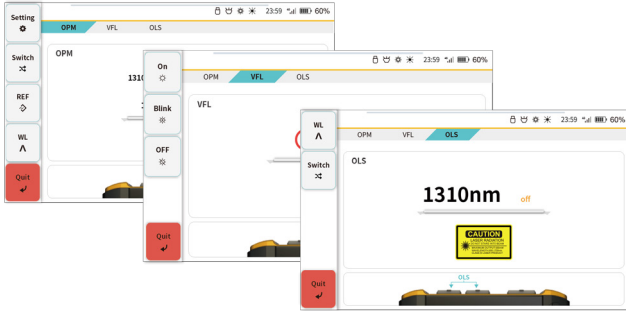
In-Service Testing

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.



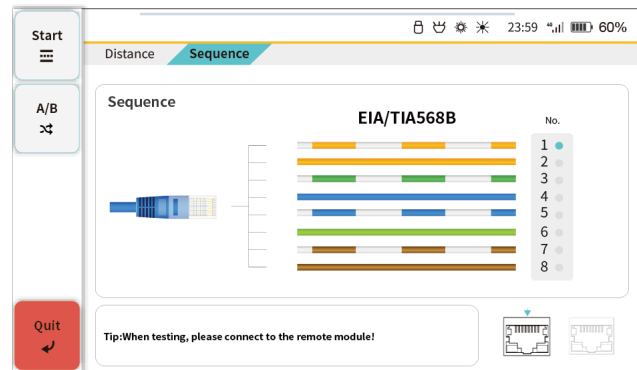
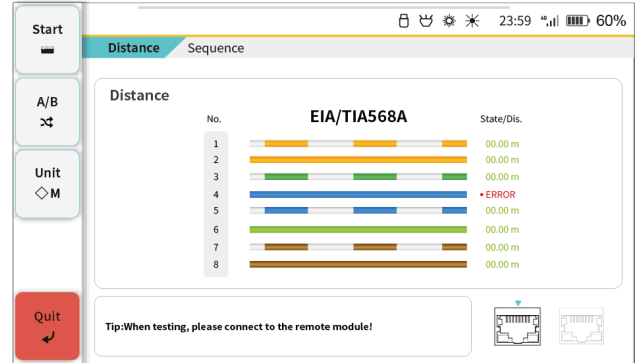
RJ45 Tracker

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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