

Ascentac OTDR710MAX Series, Optical Time Domain Reflectometer, is designed for testing and recording fiber optic network status. With high resolution and ultra-short dead zones, it ensures accurate fiber link analysis.

# **Optical Time Domain Reflectometer**

## Ascentac OTDR710MAX

Intelligent, Highly Integrated Touchscreen OTDR with Fiber Link Graphical Design for Quick Link Status Assessment

#### **Feature**

- Dynamic range up to 50dB
- Event dead zone: 0.5m; Attenuation dead zone: 2.5m
- Simultaneous comparison of up to 30 trace curves
- Fiber link graphical analysis for quick link status assessment
- Store test results and upload to PC

#### **Application**

- Telecom & CATV maintenance
- Fiber optic fault detection and repair

## Description

It features durable physical buttons and a touchscreen interface. It also includes a built-in removable optical power meter, visible fault locator, network cable tracer, and line identifier.

Ascentac OTDR710MAX offers onetouch auto measurement for easy operation, minimizing the risk of setup errors. It presents fiber link status in clear, easy-to-understand graphical format, providing immediate pass/fail results, as well as distance, loss, and reflection data for each event point. Test results can be saved and uploaded to a computer for use in generating test reports.

## Optical Power Meter and Visual Fault Locator



#### Main Unit

1 OPM / VFL module

2 Network cable tester module

3 OTDR port

4 Power Switch

5 10.1-inch display

USB port

Headphone port

8 RJ45 port

SIM card port

TF card port

Charging port



#### Network Cable Testers

- Master
- Slave



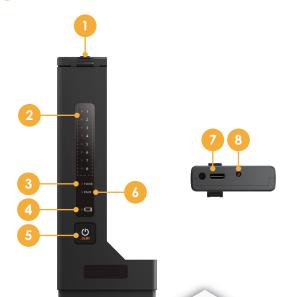
## Slave

- RJ45 port
- Line sequence indicator
- Detection sensitivity indicator
- Low battery indicator
- Power on/off button
- LED light



#### Master

- RJ45 port
- Sequence indicator
- Tracing indicator
- Low battery indicator
- Power & function switch button
- Line alignment indicator
- Type-C
- Charging indicator





### Simple and Easy to Use

- High-brightness display ensures clear visibility even in strong sunlight, making operation easier than ever.
- Fully touch-enabled interface with pinch-to-zoom for detailed OTDR trace inspection.





View up to 30 fiber traces at once for quick comparison and efficient issue analysis.



### iOLA Optical Link Analysis

Traditional OTDR testing uses a single fixed pulse width for measurement, while iOLA Optical Link Analysis employs multiple pulse widths and integrates the results to overcome the limited dynamic range of short pulses and the large dead zones of long pulses.

Users can initiate the test with a single click, and the system will automatically analyze the results based on the configured pass/fail threshold. With its intuitive interface, even beginners can easily identify if there are issues in the fiber link, as well as the exact location and nature of the problem.





#### Multi-meter

OTDR710MAX offers not only OTDR functionality but also integrates multiple fiber testing and maintenance modules, providing a comprehensive solution.

#### **Optical Light Source**

The OTDR output port can be used as a light source, supporting CW, 270Hz, 1kHz, and 2kHz modulation frequencies for easy fiber identification.

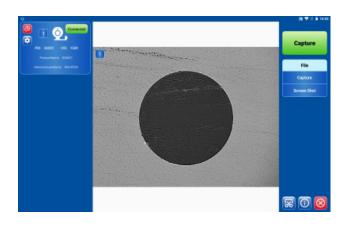
#### **Detachable Optical Power Meter and** Visible Fault Locator

Modular design allows it to be used with the main platform or independently, enabling quick optical power and loss testina.



#### **Optical Fiber Inspector**

By connecting the fiber end-face viewer via USB, you can quickly inspect the condition of the fiber end-face and check for dirt or scratches.



#### **Detachable Network Cable Testers**

Modular design allows it to be used with the main platform or independently, enabling quick identification of target network cables and verification of correct wiring sequence.





## | Specification

OTDR					
Wavelength (nm)	850 ± 20 1300 ± 20	$\begin{array}{c} 1310 \pm 20 \\ 1550 \pm 20 \end{array}$	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20 1625 ± 20
Dynamic Range (dB)	26/32	42/42	46/44	50/48	46/44/44
Event Dead Zone(m)	1	0.5			
Attenuation Dead Zone (m)	4	2.5			
Optical Ports	1				2
Measurement Distance Range (km)	0.1, 0.5, 1.25, 2.5, 5, 10, 20, 40, 60, 80, 100, 150, 200, 330				
Pulse Width (ns)	Single mode: 3, 5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000, 10000, 20000 Multi-mode (850): 5, 10, 25, 50, 100, 250, 500, 1000 Multi-mode (1300): 5, 10, 25, 50, 100, 250, 500, 1000, 5000				
Sampling Points	256000				
Minimum Sampling Interval (m)	0.04				
Linearity (dB/dB)	± 0.05				
Refractive Index Range	1.000000 to 2.000000				
Loss Resolution (dB)	0.001				
Distance Accuracy (m)	$\pm$ (0.5 + 0.001% x Distance + Sampling Resolution)				
Optical Connector	SC/UPC, FC/UPC, ST/UPC or LC/UPC				

Optical Power Meter				
Power Range (dBm)	-50 to +30			
Wavelength (nm)	850, 980, 1270, 1300, 1310, 1490, 1550, 1577, 1625, 1650			
Uncertainty (dB)	$\pm$ 0.4 @ +23 to -40dBm $\pm$ 1.0 @ +23 to +26dBm, -40 to 45dBm $\pm$ 3.0 @ +26 to +30dBm, -45 to -50dBm			
Optical Connector	2.5mm universal			
Optical Light Source				
Wavelength (nm)	Same wavelength as the OTDR			
Output Power (dBm)	> -4			
Stability (dB)	$\pm$ 0.1 @ 1 hour (Preheat for 15 minutes)			
Modulation Output	CW (Continuous Wavelength), 270Hz, 1kHz, 2kHz			
Optical Connector	Same optical connector as the OTDR			
Visual Fault Locator				
Wavelength (nm)	650 ± 20			
Output Power (mW)	10			
Modulation Output	CW (Continuous Wavelength), pulsed (4Hz)			
Optical Connector	2.5mm universal			
Network Cable Tester				
Sensitivity Adjustment	3-level			
Line Alignment Indicator	8 LED lights			
Interface	RJ45			

Display				
10.1-inch ultra-high brightness TFT color LCD touchscreen				
Resolution (pixels)	1280 x 800			
Power Supply				
DC Power Input (V/Amp)	15 / 2.67			
Charging Time (hours)	5.5			
Operating Time (hours)	> 15			
Interface				
2 USB Type A ports, 1 TF card port, 1 Nano SIM card port, 1 3.5mm headphones port, Ethernet (10/100/1000BASE-T), DC Power (5.5/2.5mm, positive inside, negative outside), 2				

USB Type C

Environment				
Working Temperature (° C)	-10 to +50			
Storage Temperature (° C)	-20 to +70			
Relative Humidity (%)	< 90			
Dimension and Weight				
LxWxH (mm)	190 x 74 x 287			
Weight (g)	2220			
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#### Standard Accessories

Main unit, Charging cable, Transformer, Adaptor cleaning sticks, Carrying bag, One-year warranty

## **Ordering Information**

**OTDR** 

OTDR 01-0071XMAX + A0-0014X

Wavelength **O**& Dynamic Range

1: 850/1300nm, 26/32dB

2: 1310/1550nm, 42/42dB

3: 1310/1550nm, 46/44dB

4: 1310/1550nm, 50/48dB

5: 1310/1550/1625nm, 46/44/44dB

Optical Connector

1: SC/UPC

2: FC/UPC

3: ST/UPC

4: LC/UPC

Optical Power Meter

**OPM 01-0015**1

O Power Range (OPM) & Output Power (VFL)

1: +30 to -50 dBm, 10mW

Network Cable Tester

NCT 01-00640A + NCT 01-00640B

**Example:** OTDR 01-00712MAX + A0-00141 + OPM 01-00151 + A0-00145 + NCT 01-00640A + NCT 01-

00640B



