OT-200

Multifiber MPO Optical Time Domain Reflectometer

M *Multi-function*

E *Extension*

S *Simple*

L *Light*

I *Intellectualization*

A *Adaptability*

P *Portable*

S *Small*

In high-density cabling scenarios such as FTTX, data centers, and enterprise networks, the application of MPO/MTP is becoming increasingly widespread, emerging as an important trend in the development of optical communication. With the rapid growth of market demand, how to efficiently deploy MPO cables has become a key issue that the industry urgently needs to address. Dimension's OT-200 series combines multi-core optical switches with OTDR and independently develops and manufactures a device that is specifically optimized for the requirements of multi-core high-density deployment and is suitable for various application scenarios of optical fiber links. This device supports one-stop fault diagnosis of multi-core optical fibers, covering up to 24-core optical fibers at most. It completely replaces the traditional method of "manually switching the optical path and testing as many times as there are cores", significantly improving the deployment efficiency, and at the same time greatly reducing the operation and maintenance difficulty for technicians.

Main Features

- One-click testing with automatic switching (supports up to 24 fibers).
- Users can customize the test channels.
- Platform-plus-modular design.
- Integrate multiple functions into one device.
- Intelligently display data in a graphical way.
- The MPO adapter comes with a built-in dust-proof design
- Small and portable, light in weight, and can be operated with one hand.
- Ultra-long battery life. With a unique replaceable smart battery.
- Single-mode and multi-mode fiber types can be selectable.

Applications

- Deployment of fiber-optic densely integrated projects such as data centers.
- Construction of MPO optical fiber cables for enterprise networks and central networks.
- Fault diagnosis of multi - core optical fiber links.

One-click testing, and the device can automatically switch channels (up to 24 cores).

This device supports one-stop fault diagnosis for multi-core optical fibers, covering up to 24-core optical fibers at most. It completely replaces the traditional method of "manually switching the optical path and conducting measurements as many times as the number of cores". This significantly improves the deployment efficiency and greatly reduces the operation and maintenance difficulty for technicians.

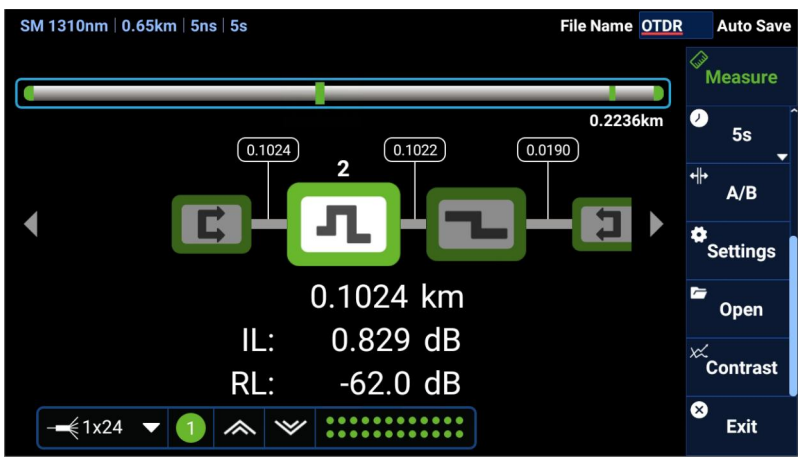
Users can customize the test channels

The OT-200 series can not only complete the relevant analysis of the basic MPO full-channel OTDR link, but also directly use the optical switch to control the multi-core link to specify the light output of the channel. The software has also been specifically designed in terms of the UI interface. In the upper right corner, the visualization of the current link is achieved by imitating the front view of the MPO end face, which improves the user's testing efficiency.

Multifunctional

Intelligently display data in a graphical way

The intelligent display of data visualizes the situation of the fiber cores of the currently preset tasks, and uses colors to remind users of the actual situation of each optical fiber link.



Optional single-mode and multi-mode fiber types

The OT-200 series optical switches support optional single-mode and multi-mode fiber types, meeting testing requirements in various environments.

The MPO adapter comes with a built-in dust-proof design

The adapter on the OT-200 device has a built-in dust-proof design, which effectively prevents the port from being contaminated or damaged when it is not in use.

Small and portable, light weight, one hand operation

Thanks to the excellent ergonomic design and small and portable body shape of Dimension Technology, it can be carried in different ways, young and fashionable. In operation, just press the shortcut key to complete the test, and the data can be automatically analyzed and saved. It only need a little training, novice can also complete the communication fault inspection.

Shoulder carrying

Single shoulder carrying

Carry with one hand

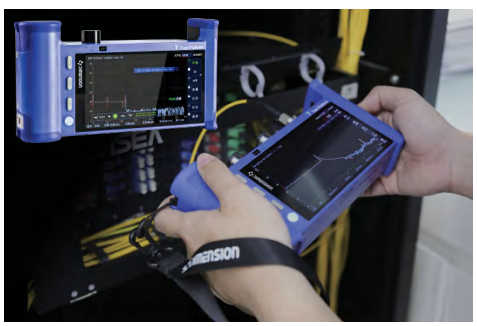
Test with one hand

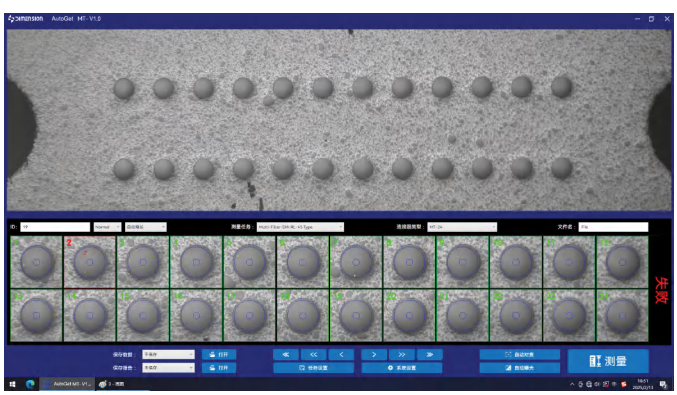
Extension

The OTDR can be perfectly integrated into the product ecological chain of Dimension Technology. It can communicate through WiFi or USB, use Dimension's app to control other test equipment and become a main device. Besides, It can also be controlled by other main devices through WiFi or USB to become a test module in a test system.

The OTDR is modular and supports programmable control via USB and RJ45 communication interfaces.

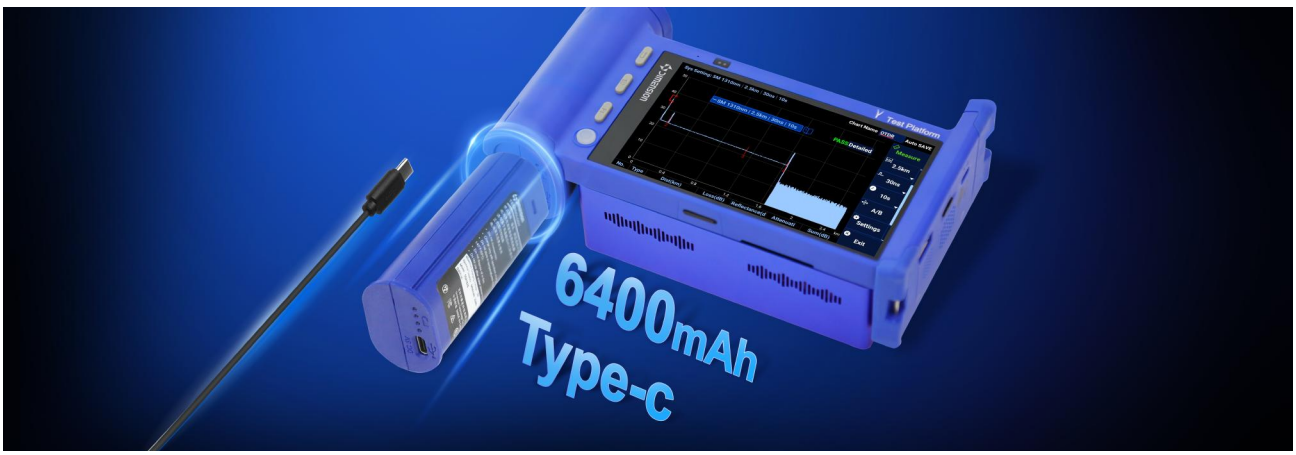
Establishes communication via USB toconnect with related ecosystem products





Long battery life, unique replaceable smart battery

The whole series of OTDR of dimension technology adopts replaceable high-capacity intelligent batteries. The battery can be charged independently, with a life time of up to 8 hours; The battery can be replaced at any time, So that you can work without worrying about power problems.



Adapt to a variety of environments

In order to cope with different scenarios and testers of different occupations, Dimension technology has made specially improvements for the reliability of such test equipment, making the use of equipment more flexible and applicable.

Specification

OTDR [1]		
Type	OT-200-2134-XX-MAF#1310/1550-12	OT-200-2222-XX-MAF#850/1300-12
Wavelength(nm)	1310/1550	850/1300
Dynamic range(dB)	34/32	22/22
Pulse width(ns)	3/5/10/30/50/100/275/500/1000/2500/10000/20000	3/5/10/30/50/100/275/500/1000/2500
Event dead zone(m)	0.75 [2]	2 [3]
Attenuation dead zone(m)	3.5 [2]	10 [3]
Linearity(dB/dB)	±0.03	
Loss resolution(dB)	0.001	
Ranging resolution(km)	0.0001	
Ranging accuracy(m)	±(0.75+ 0.005 % x distance + sampling resolution)	
Distance range(km)	0.1~120 [4]	0.1~8 [5]
Data format	SOR/PDF/HTML	

Optical Switch		
Switch Type	MEMS	
Wavelength(nm)	1310/1550	850/1300
Channel crosstalk(dB)	>50	>30
Switch time	$>10^9$	
General Parameter		
Memory capacity	16G(Extensible)	
Monitor type	5.5-inch IPS HD display	
Power supply	Lithium battery:5V,6400mAh	
Operating temperature(°C)	10 ~ 40	
Storage temperature(°C)	–40 ~ 70	
Humidity	0 % to 95 %(Non-condensing)	
Weight(kg)	<1.3	
Dimension(mm)	200*110*65	

Note:

[1] All specifications are applicable at a temperature of 23 °C ± 1 °C

[2] SM Deadzone test conditions: SM1550/3ns/0.65km/180s; The event reflection coefficient is -45 ± 2dB

[3] MM Deadzone test conditions: MM1300/3ns/0.65km/180s ; The event reflection coefficient is -45 ± 2dB

[4] SM distance testing conditions: SM1550/20μs/260km/180s; The event is a whole roll of optical fiber, with no other events.

[5] MM distance testing conditions: MM1300/2.5μs/20km/180s; The event is a whole roll of optical fiber, with no other events.

Ordering information

OT-200 — [ ] [ ] [ ] —XX— [ ] # [ ] — [ ]

Number of wavelengths	
1	One wavelengths
2	Two wavelengths

SM/MM	
1	Single mode
2	Multi mode

Dynamic range	
22	22dB(MM 850)
34	34dB(SM 1310)

Connector Type	
MAF	MPO/APC/Female

Optional wavelength
1310(SM)
1550(SM)
1625(SM)
1650(SM)
850 (MM)
1300(MM)

Channel	
12	12CH
16	16CH
24	24CH

Example:

Model:OT-200-2134-XX-MAF#1310/1550-12

12F OTDR, two wavelength 1310/1550,34dB dynamic range,MPO/APC/Female connector

Relate product

OT-100

EasyGet Wifi MT

Autoget MT

Optical Probe

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OSW Settings
Task
1x24
Add
Basic Parameters
OSW
ON 1
ON 2
ON 3
ON 4
ON 5
ON 7
ON 8
ON 9
ON 10
ON 11
ON 13
ON 14
ON 15
ON 16
ON 17
ON 19
ON 20
ON 21
ON 22
ON 23
Test Platform
SM 1310nm | 0.65km | 5ns | 5s
File Name OTDR
Auto Save
PASS Detailed
SM 1310nm | 0.65km | 5ns | 5s
Measure
5s
A/B
Settings
Open
Contrast
Exit
1x24
No.
Type
Pos./Length(km)
Loss(dB)
Reflectance(dB)
Att.(dB/km)
Cumul.(dB)