

# ADVANCED SM+MM OTDR

Dual-Wavelength, Three-Wavelength, Four-Wavelength

1310/1550, 850/1300, 1310/1490/1550, 1310/1550/1625, 1310/1550/1650, 850/1300/1310/1550



## I. INTRODUCTION

This OTDR series Optical Time Domain Reflectometer (OTDR) is the new generation of intelligent meter for the detection of fiber communications systems. With the popularize of optical network construction in cities and countryside, the measurement of optical network became short and disperse, it is specially designed for that kind of application, its economic and also have outstanding performance.

These series OTDR can test dual wavelengths, three wavelengths and four wavelengths: 1310nm/1550nm, 850nm/1300nm, 1310nm/1490nm/1550nm, 1310nm/1550nm/1625nm, 1310nm/1550nm/1650nm and 850nm/1300nm/1310nm/1550nm.

The OTDR series is mainly used to measure the length, loss and connection quality of all kinds optical fiber cables. It can also be widely used in engineering construction, line maintenance & testing, emergency repair, the development and production of optical fiber cables.

## II. FEATURES

- Integrated design: smart and rugged
- Small and light: easy to carry
- Battery indicate function
- Long working hours for outdoor operation
- Warning function could prevent OTDR damaged from optical signal
- Multi-measuring mode, simple to use, finish measurement by just one button
- Real-time measuring function: convenient to monitor the splicing process
- Integrated with 8G internal memories: store more than 80000 groups of curve
- Provide data simulation software to process, generate and print report
- 1625nm online detection module with filter is available as an option for an online FTTx/PON detection
- Standard function: OTDR, Visual Fault Locator, Optical Laser Source, Optical Power Meter



### III. MAIN MENU

Optical Power Meter

Laser Source

OTDR

Visual Fault Locator

Event Map

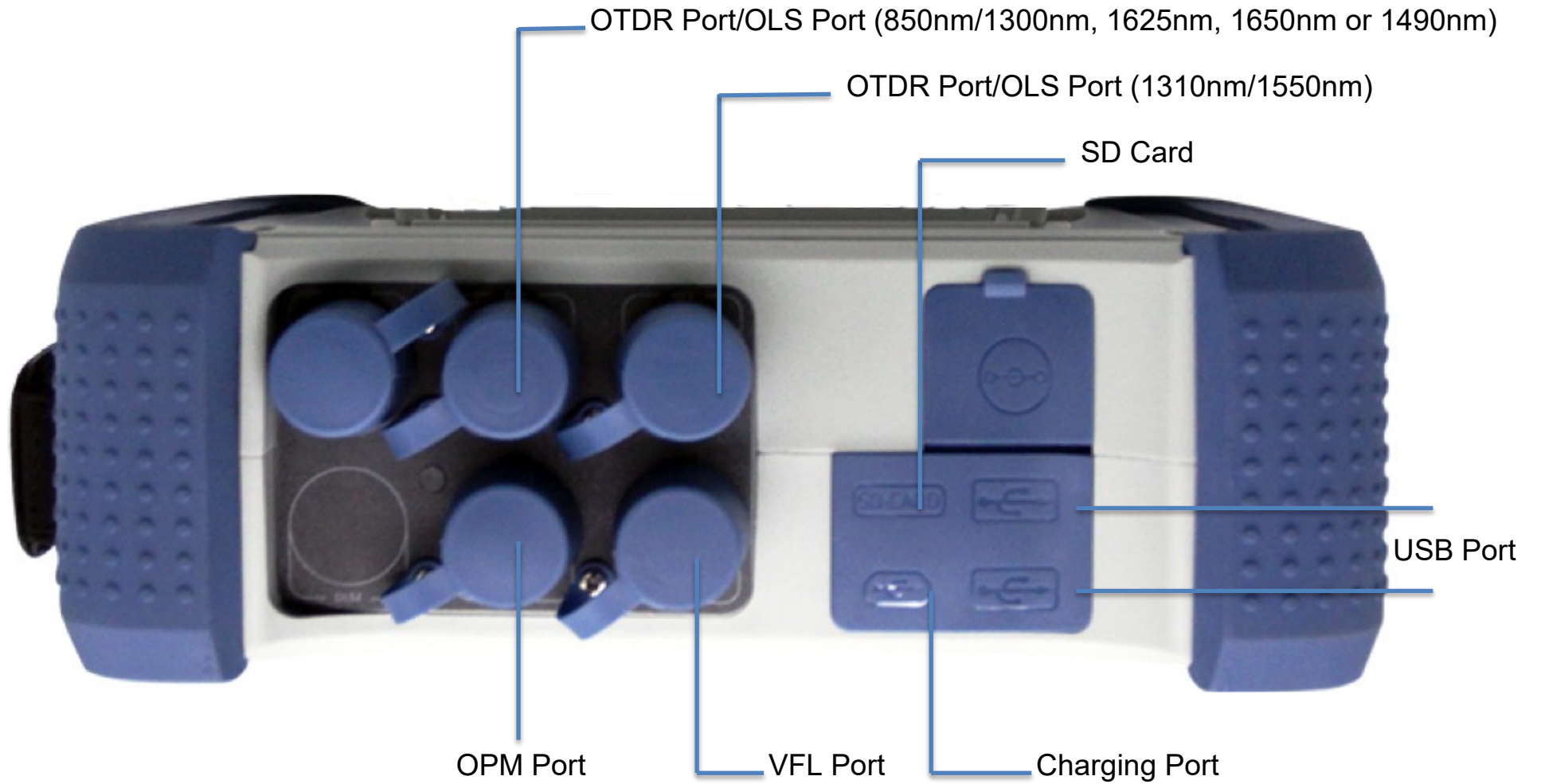
File Management

Fiber Inspection Probe  
(Unavailable Now)

System Setting



## IV. PORTS



# V. SPECIFICATIONS

## OTDR Module

Sub Model	FOMS-F2-OTDR-MM-8513-FCSCST	FOMS-F2-OTDR-MM-SM-FCSCST
Fiber Type	MM Fiber	SM+MM
Wavelength (nm)	850,1300	1310,1550, 850,1300
Dynamic Range (dB)	20/26	32/30/20/26
Event Dead Zone	1m	1m
Attenuation Dead Zone	5m	5m
Testing Distance	500m/2km/5km/10km/20km/40km/80km/120km/160km	
Pulse Width	3ns/5ns/10ns/20ns/50ns/100ns/200ns/500ns/1μs/2μs/5μs/10μs/20μs	
Measurement Time	Use-defined (smart link); with real-time measurement function	
Linearity	≤0.05dB/dB	
Loss Threshold	0.01dB	
Loss Resolution	0.001dB	
Distance Resolution	0.01m	
Sampling Resolution	Minimum 0.25m	
Sampling Point	Maximum 128,000 points	
Distance Accuracy	±(1m+measuring distance×3×10 <sup>-5</sup> + sampling resolution)	
Data Storage	80000 groups of curve	
Interface	3 USB Ports	
Adapters	FC/PC, SC/PC, ST/PC	



## VFL Module (Standard)

Wavelength	650nm
Output Power	10mw
Working Mode	CW/2HZ
Adapters	2.5mm Universal



## Optical Power Meter Module (Standard)

Wavelength	850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
Measurement Range	-50dBm~+26dBm or -70dBm~+10dBm
Adapter	FC/PC, SC/PC, ST/PC

## Optical Laser Source Module (Standard)

Wavelength (nm)	Same with OTDR Wavelengths
Fiber Type	SM/MM
Output Power	>-5dBm
Adapter	FC/PC, SC/PC, ST/PC

## General Parameters

Language	Chinese/English
Display	7 Inch Capacitive Touching Screen
Interface	3 USB Ports
Power Supply	7.4V, 6600mAh Lithium Battery
Continuous Working Time	8~10 Hours
Working Temperature	-10°C ~ +50°C
Storage Temperature	-20°C ~ +75°C
Humidity	≤90% (non-condensation)
Dimension	230mm x185mm x 70mm
Weight	≤1.5kg (battery included)



## VI. APPLICATIONS

- Measure the loss of splicing points, optical connectors and adapters.
- Measure the loss of single fiber or cable
- Measure the length of cable, set different refractive index for various fibers.
- Locate the position of broken point, optical connector and adapter.
- Measure the discrete reflection ratio between SR points.
- Measure return loss for whole fiber circuit including connecting points and s points.