

# **MOT-500 Mini OTDR series**

# **Description:**

MOT-500 series Optical Time Domain Reflectometer (OTDR) is an intelligent meter of a new generation for the detection of fiber communications systems. With the popularization of optical network installed in cities and countryside's, the measurement of optical network becomes short and disperses; MOT-500 is specially designed for that kind of application. It's economic, having outstanding performance.

MOT-500 is manufactured with patience and carefulness, following the national standards to combine the rich experience and modern technology, subject to stringent mechanical, electronic and optical testing and quality assurance; in the other way, the new design makes MOT-500 more smart and compact and multi-purpose.

Whether you want to detect link layer in the construction and installation of optical network or proceed efficient maintenance and troubleshooting, MOT-500 can be your best assistant.



MOT-500

#### **Features:**

- Integrated design, smart and rugged
- 7-inch anti-reflection LCD screen
- 1 m height anti-fall
- Fiber link map test
- 1 m ultra short deadzone
- Through splitter up to 1x64 test
- 400x fiber microscope
- Remote control function
- Support multi-language display and input

# **Application:**

- FTTX test with PON networks
- CATV network testing
- Access network testing
- LAN network testing
- Metro network testing
- Lab and Factory testing
- Live fiber troubleshooting

#### **VFL** (visual fault locator)

The VFL, available as a standard module in MOT-500 series OTDR, offers built-in 650 nm visual fault location on a FC/UPC connector.

#### PM (power meter)

MOT-500 series OTDR comes with optional built-in power meter that let technicians easily verify the presence of a signal.



### LS (laser source)

MOT-500 series OTDR comes with optional built-in laser source through OTDR1 Port that let technicians easily verify the total loss of the local network with a power meter.

# **FM** (fiber microscope)

The optional fiber inspection probe facilitates the inspection before the connection. MOT-500 series OTDR offers this capability through a USB port connection, which allows quick and easy inspection of connector end faces for contamination and also enables it capture and store the image.

#### **FTTH test within PON networks**

MOT-500 series OTDR's models T45F and 31-49-55/62, are dedicated to the testing of PON network maintenance and troubleshooting without service disruption.

MOT-500 series OTDR could easily test through 1x64 PLC splitter in PON test (Model: MOT-500-T45F).

# **Fiber Microscope**

Microscope is optional for MOT-500 series OTDR. 400x amplification and variety of accessories ensure perfect terminal condition before test.

#### **iOLA**

Fiber link monitor functionality.

# Specification

Specification								
Dimension	246×173×70 mm 1.55 kg (battery included)							
Display	7 inch multi-touch color LCD screen							
T 1 C	USB: 2x USB2, 1x USB3							
Interface	Network: RJ45 port, 10/100M  Audio: 3.5 mm headphone jack							
Buzzer	14 mm voltage buzzer							
Power Supply	12 V / 2 A DC, 100 to 300 V AC, 50-60 Hz							
Battery	7.4 V DC, 5.2 Ah rechargeable lithium battery Standby >15 hrs, testing > 8 hrs							
Data Storage	Internal memory: 10 000 testing results							
Language	English							
Environmental Conditions	Operating temperature and humidity: -10°C to +50°C  Storage temperature and humidity: -20°C to +60°C  ≤90% (non-condensation)							
Accessories	Standard: main unit, power adapter, Lithium battery, FC adapter, user guide, CD disk, carrying case, micro SD card							



**Technical parameter** 

Туре	Testing Wavelength (nm)	Dynamic Range (dB)	Dead-zone Event/Attenuation (m)
MOT-500-T45F	1310/1550/1625	45/43/43	0.5/3.0
MOT-500-T43F	1310/1550/1625	40/38/36	0.5/3.0
MOT-500-MD21	850/1300 1310/1550	19/21 35/33	1.5/8 1.5/8
MOT-500-D45	1310/1550	45/43	2/14

Test parameter

rest parameter								
Pulse Width	SM: 3 ns, 5 ns, 10 ns, 20 ns, 50 ns, 100 ns, 200 ns, 500 ns, 1 μs, 2 μs, 5 μs, 10 μs, 20 μs							
Test range	100 m, 500 m, 2 km, 10 km, 20 km, 40 km, 80 km, 120 km, 160 km, 240 km							
Sampling Resolution	Minimum 0.1 m							
Loss resolution	0.001 dB							
Distance Uncertainty	± (0.8 m+0.005% x testing distance + resolution)							
ОРМ	PM: -65 to+5 dBm PMH: -50 to +26 dBm							
OFM	850/1300/1310/1490/1550/1625 nm							
OLS	1310/1550/1625 nm							
OLS	CW, 270 Hz, 1 kHz, 2 kHz							
VFL	<1 mW, 630-670 nm, Class II laser product							

# **Ordering Code:**

MOT-500	-	XX	X	_	LS	-	PM(H)	-	FM	-	VFL	-	YYY
T45F	PON testing							YY	<b>Y</b> -	conne	ctor	type	
T43F	PON testing							UP	C	FC/PC	2		
D45	Long haul testing							NP	C¹	FC/AF	C		
MD21	Bas	sic MM+S	M tests	;									

#### **Options:** On request:

LS SC/PC, SC/APC, LC/PC, ST/PC adaptors laser source

PΜ power meter standard **PMH** power meter high power

FΜ fiber microscope **VFL** visual fault locator

1) FC/APC - 2.05 type: Note:

Plug key width 1.97-2.02 mm Receptacle keyway width 2.03-2.08 mm