

# MOT-940 Mini OTDR series

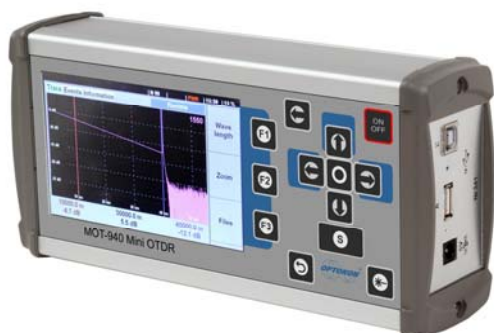
## Description:

The MOT-940 Mini optical reflectometer series comes in a compact metal housing with all functions as a full OTDR. The reflectometer determines the distance to reflecting and non-reflecting events and measures insertion loss of optical line and attenuation loss. In addition, the MOT-940 is fitted with an optical power meter and a visible light source. The internal memory allows the storage more than 1000 traces, USB interface is designed for saving of data onto USB flash memory.

Power supplying is ensured with inbuilt rechargeable Li-Ion battery, which provides long term working time.

The MOT-940 is designed for testing single mode and multimode optical fiber parameters in the process of installation, operation and maintenance, respectively the fault location in field conditions:

- Backbone and local networks
- FTTx networks, PON
- Access networks



MOT-940-A-31-55-PMH-VFL-UPC

## Features:

- Portable, light weight reflectometer
- MM + SM measurement
- Large LCD color screen
- Optical trace analysis
- High dynamic range
- PMH module – measures optical power
- VFL module – visible light source 650 nm
- PC control option
- TopOTDRViewer evaluation SW – reporting solution
- Internal memory for 1000 traces
- File in Bellcore format
- Upgrading of internal software via USB

## Specification:

OTDR module <sup>1</sup> PN:	940-01		940-02	940-03	940-04		940-05		940-24	
	940-A-85-30/31-55		940-A-31-55	940-A-31-49-55	940-A-31-55/62		940-A-31-49-55/62		940-A-31-55-62	
Fiber Type	MM	SM	SM	SM	SM		SM		SM	
Wavelength (nm)	850/1300	1310/1550	1310/1550	1310/1490/1550	1310/1550	1625	1310/1490/1550	1625	1310/1550/1625	
Dynamic range <sup>2</sup> (dB)	28/30	39/38	41/40	41/39/40	41/40	39	41/38/39	39	41/40/39	
Pulse width (ns)	MM	5, 10, 20, 50, 100, 300, 1 000, 3 000, 10 000								
	SM	5, 10, 20, 50, 100, 300, 1 000, 3 000, 10 000								
Distance range (km)	0.25 - 250									
Event dead zone <sup>3</sup> (m)	0.8 m									
Attn. dead zone <sup>3</sup> (m)	4.5 m									
Sampling points	Up to 128 000									
Data point spacing	0.2 – 20 m									
Distance uncertainty	±(1+0.005%*distance+data point spacing) m									
Linearity	0.04 dB/dB									
Trace file format	Telcordia Tech. SR-4731									
Trace file storage	1000 traces internal memory, next 1000 traces on external memory									
Internal memory	2 GB									
Data transfer to PC	USB 2.0 (type B); USB-flash memory > 8 GB									
OTDR modes	Auto / Expert / Real Time									
<b>Power Meter</b>										
Power range (dBm)	PM: -85 to +6 PMH: -60 to +20									
Accuracy (dB)	0.3									
Resolution (dB)	0.01									
Working wavelength (nm)	850, 1310, 1490, 1550, 1625									
Units	dBm, dB, mW									
<b>Light Source</b>										
Spectral width (nm)	< 5									
Output power (dBm)	> -3									
Stability @ 1310/1550 nm (dB)	±0.25									

Visual fault locator	
Light source	Laser
Wavelength (nm)	650
Output power <sup>4</sup> (mW)	0.8
General specifications	
Size (mm)	225 x 110 x 55
Weight (kg)	0.8 kg
Power source	Li-Ion battery
Display	LCD 800 x 480, 5 inch color display

Note: 1) For complete details of all available configuration refer to Ordering code  
 one port module: 940-02, 940-03, 940-24  
 two ports module: 940-01, 940-04, 940-05  
 2) Typical dynamic range with three minutes averaging at SNR=1  
 3) Typical dead zone for single mode fiber for Return loss > 45 dB, 5 ns pulse  
 4) Typical into 9 μm SM fiber

**Standard Accessories:**

- FC adapters
- Battery charger
- Soft carrying case
- USB Cable
- Protective dust cap
- OF-1625<sup>5</sup> – external filter 1625 nm

**Options:**

- Master Patchcord
- Launch cable
- Set of optical adapters
- OF-1625<sup>6</sup> – external filter 1625 nm

Note: 5) Filter 1625 is delivered with MOT-940-A-31-55-62-PMH-VFL as standard  
 6) Filter 1625 is delivered with MOT-940-A-31-55/62-PMH-VFL as option (the separate port 1625 nm is equipped with internal 1625 nm filter)

**Ordering Code:**

MOT-940 – A - wavelength - PMH<sup>7</sup> - VFL<sup>8</sup> - YYY

**Light source:**  
as below

YYY - connector type			
UPC	FC/UPC	USC	SC/USC
NPC	FC/APC	NSC	SC/APC

Note – standard equipped modules: 7) PMH High power meter  
 8) VFL Visual Fault Locator

Light source code	Description
31-55	One port: 1310 and 1550 nm
31-49-55	One port: 1310, 1490 and 1550 nm
31-55-62	One port: 1310, 1550 and 1625 nm
31-55/62	One port: 1310, 1550 nm, Second port: 1625 nm
85-30/31-55	One port: 850 and 1300 nm Second port: 1310 and 1550 nm
31-49-55/62	One port: 1310, 1490 and 1550 nm, Second port: 1625 nm

**Application:**

