

# Specifications

## MT9090A Mainframe

Dimensions and Mass	190 (W) × 96 (H) × 48 (D) mm (7.5" × 3.8" × 1.9") (including Mainframe and Module) <700 g (1.54 lbs.) (including Mainframe, Module and Standard battery)
Display	4.3-inch TFT Color LCD (480 × 272 pixels, Transmissive)
Interface	USB 1.1, Type A × 1 (memory), Type B × 1 (USB mass storage)

## μOTDR Module Common (MU909014C/C6, MU909015C/C6, MU909014A1/B/B1 and MU909015B/B1, MU909015A6)

Fiber Type	10 μm/125 μm SMF (ITU-T G.652)	
Optical Connector	FC/SC/DIN adapter are changeable	
Distance Range	0.5, 1, 2.5, 5, 10, 25, 50, 75, 125, 250 km (IOR = 1.500000)	
Pulse Width	5, 10, 20, 50, 100, 200, 500 ns, 1, 2, 5, 10, 20 μs	
Linearity	Which ever is greater ±0.05 dB/dB or ±0.1 dB	
Return Loss Measurement Accuracy*1	±2 dB	
Distance Measurement Accuracy	±1 m ±3 × Measurement distance × 10 <sup>-5</sup> ±Marker resolution (excluding IOR uncertainty)	
Data Storage	Internal memory: 40 MB (<1,000 traces) External (USB Memory): 1 GB (<30,000 traces)	
IOR Setting	1.3000 to 1.7000 (0.0001 steps)	
Units	km, m, kft, ft, mi	
Other Functions	Integrated launch fiber: 10 m (30 ft) Connection check: Automatic check of OTDR to FUT connection quality Live fiber detect: Verifies presence of communication light in fiber Real time sweep: <1 sec (typ.) Macro bend analysis (without single-wavelength model) Bluetooth, Wi-Fi and Ethernet connectivity "Fiber Visualizer (FV)" function "DCFL" function (differs with selected module) Password protect function Video inspection probe (option)	
Language	User selectable (English, Simplified Chinese, Traditional Chinese, Korean, Japanese, French, German, Italian, Spanish, Polish, Portuguese, Finnish, Danish, Swedish, Spanish (Latin America), Russian and Dutch)	
Power Supply	9 V(dc), 100 V(ac) to 240 V(ac), Allowable Input voltage range: 90 V(ac) to 264 V(ac), 50 Hz/60 Hz	
Fiber Event Analysis	Automatic, Displayed in table format based on user defined PASS/FAIL thresholds	
Loss Measurement Modes	2-point loss, Splice loss, dB/km Loss LSA, ORL, Event	
OTDR Trace Format	Telcordia universal (.SOR) issue 2 (SR-4731)	
Battery	NiMH (Standard battery), NiMH (AA Type), Alkaline Dry Battery (AA Type)*2 Operating time (Standard battery): 8 hours (typ.)*3, Telcordia GR-196-CORE Issue2, September 2010 Recharging time: <4 hours (typ.)*4	
CE	EMC	EN61326-1, EN61000-3-2
	LVD	EN61010-1
	RoHS	EN50581

## MU909014C/C6 and MU909015C/C6 μOTDR Module

Model Name	MU909015C/C6-057 MU909015C/C6-067	MU909015C/C6-058 MU909015C/C6-068	MU909015C/C6-059 MU909015C/C6-069	MU909014C/C6-057 MU909014C/C6-067	MU909014C/C6-058 MU909014C/C6-068
Center Wavelength*5	1310/1550 ±20 nm*6 1625 ±15 nm	1310/1550 ±20 nm*6 1650 ±15 nm	1310/1490/1550 ±20 nm*6	1310/1550 ±20 nm*6 1625 ±15 nm	1310/1550 ±20 nm*6 1650 ±15 nm
Dynamic Range*7,*8	PW = 20 μs	38 dB/37 dB/35 dB*9,*10	38 dB/37 dB/35 dB*9,*10	36 dB/35 dB/35 dB	32.5 dB/31 dB/32.5 dB*9,*11
	PW = 500 ns	27 dB/26 dB/25 dB*9,*10	27 dB/26 dB/24 dB*9,*10	25 dB/24 dB/24 dB	24.5 dB/23 dB/24 dB*9,*11
Dead Zone*12 (IOR = 1.500000)	Fresnel: ≤0.8 m (Typical) Backscatter: ≤4.0 m (1310 nm, Typical), ≤4.5 m (1490/1550/1625/1650 nm, Typical)				
Number of Sampling Points*13	<250,001 pts (Course: <7,501 pts, Medium: <20,001 pts, Fine: <250,001 pts)				
Sampling Resolution	2 cm (min.)				
Testing Modes	OTDR (Full automatic, Manual, Real time), Power Meter, [Video Inspection Probe (Option)] [PON Power Meter, Loss Test Set, Light Source (MU909015C6, MU909014C6)]				
Power Meter	Please refer to the spec "Power Meter"				
PON Power Meter (only for MU909015C6/14C6)	Please refer to the spec "PON Power Meter"				
Light Source (only for MU909015C6/14C6)	Please refer to the spec "Light Source"				
Loss Test Set (only for MU909015C6/14C6)	Please refer to the spec "Loss Test Set"				
Environment	Operating temperature and humidity: -10° to +50°C, <95% (no condensation) Storage temperature and humidity: -30° to +70°C, <95% (no condensation) Vibration: MIL-T-28800E Class 3, Dust and Drip proof: IP51				
Laser Safety*14	IEC Pub 60825-1: 2007 Class 1M, 21CFR1040.10				