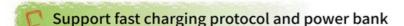# MERCURY Series High-Performance OTDR

Product overview

Mercury series is a high performance and next generation OTDR, Supply 7 inch capacitance touch screen. It integrates 9 modules (OTDR/VFL/LS/OPM/Event map/End Detection/Optical Loss Test / Ethernet Test / Remote Test & File Management) to help customers efficiently solve the field test & Maintenance issues.

Thanks to its excellent intelligent hardware & software design, it is able to deliver higher accuracy of short fiber test & automation test. It is equipped with powerful ethernet test (Ping/PPOE). Mercury Series OTDR is used to test the optical fiber length, loss & connection quality and used in the engineers construction, link maintenance test. It is mainly used in engineers construction, emergency repair of optical fiber communication system, research & production measurement of first class optical fiber cable.

Product features

- 0.5m Event Dead Zone
- Online detection, effective APD active protection
- Support fast charging protocol and power bank
- Ethernet test, supporting Ethernet Remote Test
- Support SM/MM/SM+MM test
- PON network online test
- Maximum dynamic range 46dB
- Mobile APP wireless operation
- Integrate OTDR/VFL/LS/OPM/Event Map/End Detection/Optical Loss Test/Ethernet test/ Remote test/File management

7 inch screen Key + touch operation mode	Detection of online test Caution function	Two languages input Nomenclature in Chinese and English	Report printing Files batch processing	Multi wavelength simultaneous test Results automatic analysis

Mercury Series Technical specifications

	OTDR												
Model	S0	S1	S2	S3	S4	T1	T2	T3	T4	T5	T6	F1	
Type	SM												
Wavelength	1310/1550nm					1310nm /1490nm /1550nm		1310nm /1550nm /1625nm		1310nm /1550nm /1650nm		1310nm /1490nm /1550nm /1625nm	
MaxDynamicRange(dB)	32/30	35/33	38/36	42/40	46/45	32/30/30	37/35/35	32/30/30	37/35/35	32/30/30	37/35/35	37/35/35/35	
Event Blind Zone	0.8m	0.5m				0.8m	0.5m	0.8m	0.5m	0.8m	0.5m	0.5m	
ATT Blind zone	4m	3.5m				4m	3.5m	4m	3.5m	4m	3.5m	3.5m	
Test Range	100m/500m/1.25km/2.5km/5km/10km/20km/40km/80km/125km/260km/420km												
Pulse Width	3ns/5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/500ns/800ns/1us/2us/3us/5us/8us/10us/20us												
Ranging accuracy	± (0.75m+ Sample interval+0.0025％×Test distance)												
Loss accuracy	0.03dB/dB												
Sample Points	≥256k												
Sample Resolution	0.015m~16m												
Reflection Accuracy	±2dB												
Loss Resolution	±0.001dB												
Loss Threshold	0.01dB												
File Format	SOR Standard File Format												
Loss Analysis	4-point method /5-point method												
Laser Safety Level	Class Ⅱ												
Refresh Rate	4Hz (Typ.)												
Data Storage	Internal storage: 2GB, 200,000curves; External storage:64GB												
Connector	FC/UPC （Interchangeable SC、ST）												
Data Interface	USB-A、Type-C port, RJ45 LAN 10/100Mbit/s												

	OPM
Wavelength range	800nm~1700nm
Connector	Universal FC/SC/ST
Test scope	-50dBm~+26dBm/-70dBm~+6dBm
Uncertainty	±5%
Calibration wavelength	850nm/980nm/1300nm/1310nm/1490nm/1550nm/1625nm/1650nm

	LS
Laser Type	FP-LD
Wavelength	Consistent with OTDR output wavelength
Output power	≥-5dBm (SM fiber)
Mode	CW/270Hz/1kHz/2kHz
Stability	CW, ±0.5dB/15min （Test after 15 minutes of preheating）
Connector	FC/UPC （Interchangeable SC、ST）

	VFL
Wavelength	650nm±20nm
output power	≥10mW
Mode	CW/1Hz/2Hz
Connector	FC/UPC （Interchangeable SC、ST）
The Optical Loss Test index refers to the above light source and optical power meter index.	

	Others
Display	7 inch color LCD + touch screen Resolution：800×480
Power supply	Type-C adapter：Input：100V~240V , 50/60Hz ,Output:5V/3A,9V/2A,12V/1.5A Lithium battery：3.7V,10400mAh
working mperature	-10℃~+50℃
Storage temperature	-40℃~+70℃
relative humidity	0~95％，Non Condensing
Weight	≤1.2kg
Size	215mm×160mm×50mm
Functions of Host: OTDR/VFL/LS/OPM/Event Map/End Detection/Optical Loss Test/Ethernet test/Remote test/File management	

Configuration list

NO.	Name	Quantity	Remarks	NO.	Name	Quantity	Remarks
1	Host	1		7	User's Manual	1	
2	AC/DC power adapter	1		8	Calibration certification	1	
3	U disk (containing analysis software/ User's Manual)	1		9	Certificate/ Warranty card	1	
4	Data line	1		10	Clean cotton piece	10	
5	OTDR SC adapter	1		11	Leather knob	1	
		1		12	Special backpack for instrument	1	