

ShinewayTech® compact palmOTDR now offers even more testing capacities, flexibility and value with combination of 850/1300/1310 /1490/1550/1625/1650nm (Mono/double/triple wavelength) OTDR , 1310/1490/1550nm PON Power Meter, Stabilized Laser Source and VFL. The OTDR wavelengths cover the applications of regular end-to-end fiber characterization (1310/1550nm), premise/enterprise LAN testing (850/1300nm), FTTx fiber link construction verification (1490nm) and PON live fiber troubleshooting (1625/1650nm with filter). The integrated PON Power Meter can perform in-service testing of all PON signals (1310/1490/1550nm) on any spot of the network featuring pass-through design and burst mode support. palmOTDR is your ultimate solution to meet various testing requirements of entire fiber network.

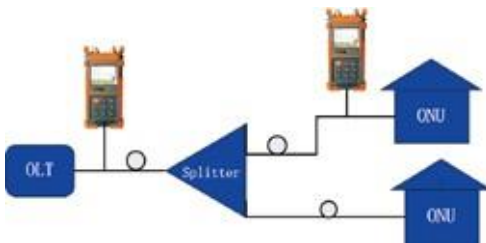


## Most Compact High-Performance OTDR

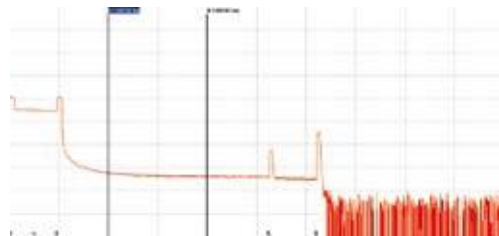
- ◆ Comprehensive fiber applications, ideal for LAN/WAN/FTTx certification & troubleshooting:  
SM: 1310/1490/1550, 1625/1650nm (with filter), up to 50dB  
MM: 850/1300nm, 21/24dB
- ◆ Fault locating, fiber length/loss measurement, connector/splice/ splitter/ macro bend/fiber-end detection
- ◆ Built-in PON Power Meter for Triple-play live measurement
- ◆ Optional Stabilized Laser Source, SM/MM Power Meter and VFL
- ◆ FTTx in-service testing/ Testing through splitter:(1625/1650nm with filter)
- ◆ Splitter & fiber-end identifiable
- ◆ Auto/Manual(2-point/5-point)/Averaging/Real-time test
- ◆ Pass/Fail assessment and ORL test function
- ◆ Quick start: <5 seconds
- ◆ Perfect user interface, handheld & lightweight (1kg)
- ◆ Hotkeys: Easiest operation in the world, push-and-test
- ◆ 1000 test records storage
- ◆ Bell core file format (.sor)
- ◆ PC software for batch data processing
- ◆ USB data interface, driver-free
- ◆ Multiple languages: EN/DE/IT/FR/ES/PT/RU/KR/VN/CN etc.
- ◆ 8 hrs continuous operation/20 hrs standby
- ◆ Dust-shock proof (2m drop test)
- ◆ CE, FCC, FDA certificates

## In-service Testing (Through Splitter)

- In-service testing (1625nm with filter)

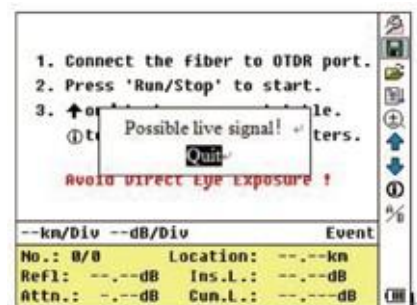


- Testing through splitter, splitter and fiber end identifiable



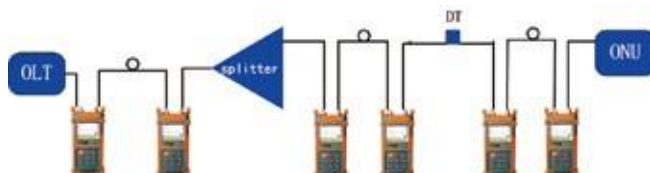
## Live Optical Signal Check

When the OTDR tests with 1310/1490/1550nm wavelength, the live signals transmitting in the tested fiber may not only affect OTDR measurements but also damage the equipment connected to the network (SDH/WDM/ PON) and OTDR receiver. The palmOTDR series avoids the problem by starting in-service communication check before testing with message warning and auto termination functions to effectively protect test instruments and communications equipment.



## Built-in PON Power Meter

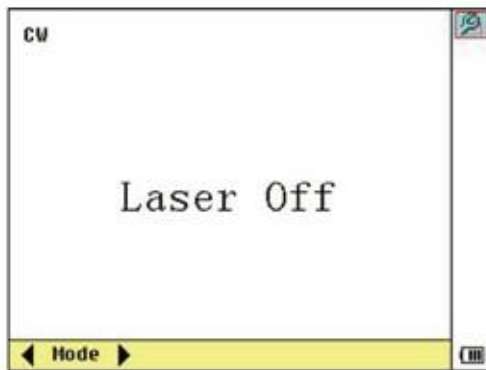
The integration of a PON Power Meter into such a small unit of the palmOTDR makes FTTx certification and troubleshooting an exciting experience and efficient workmanship. The PON Power Meter module can perform in-service testing of all PON signals (1310/1490/1550nm) on any spot of the network featuring pass-through design, burst mode and Pass/Warning/Fail assessment function, which can greatly help you evaluate PON signals transmission quality.



Threshold			
Threshold Name:			
	1310nm	1490nm	1550nm
FAIL	3.00	-2.50	8.50
PASS	-1.50	-21.00	-9.50
WRNG	-2.50	-24.00	-12.50
FAIL			

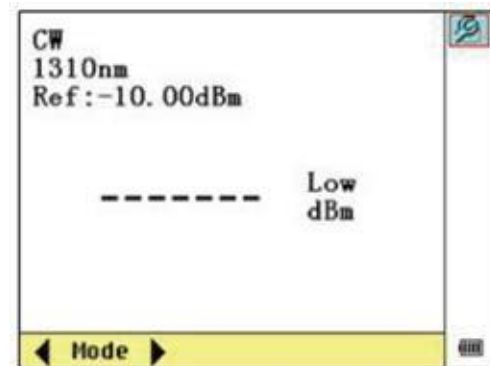
## Extended Stabilized Laser Source

Stabilized Laser Source shares palmOTDR optical port and work on the same working wavelength of palmOTDR.



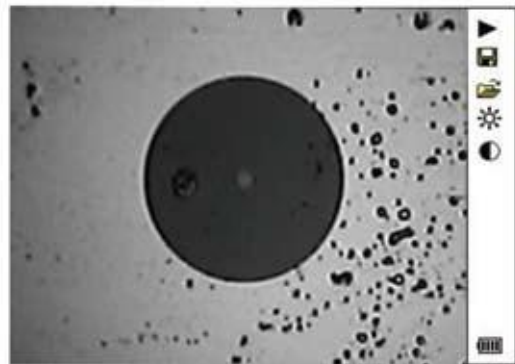
## Extended Optical Power Meter

- No warm-up
- Absolute power value and power loss measurement
- High accuracy, zero shift
- Power monitoring, high-low limit setting
- Reference setting



## Extended Optical Connector Inspector Module (MCI100 module)

- Focusing knob for fast focus
- Eye-safe and clear video viewing
- Interchangeable connector tips (male and female, PC and APC, 1.25mm and 2.5mm etc.)

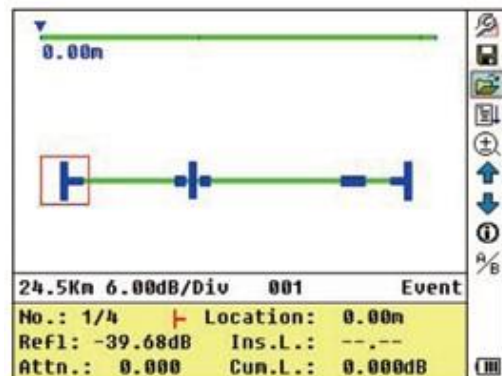


## Optimized Interface design

- Graphical User Interface
- Color and High Resolution



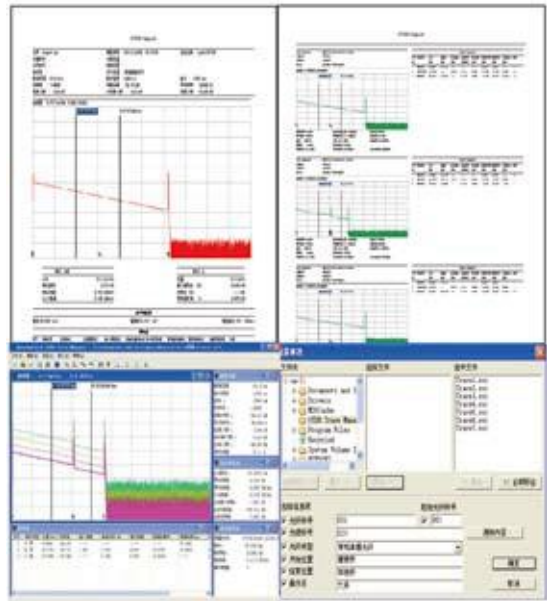
## OTDR LinkImage Software



## OTDR Trace Manager Software

TraceManager software can display, analyze and edit trace files, generate and print comprehensive test and analysis reports in various forms.

- Trace viewing, events analysis
- Batch editing and flexible printing
- Trace viewing, events analysis
- Multi traces comparison
- Batch editing and flexible printing
- Bidirectional testing (Optional)
- CSV/ASCII report formats



## Specifications

	Model <sup>(1)</sup>		Wavelength (±20nm)	Dynamic Range <sup>(2)</sup>	EDZ (m) <sup>(3)</sup>	ADZ (m) <sup>(3)</sup>
	Basic	Advanced				
	palmOTDR-M20AE	palmOTDR-M20AE-VPSI	850/1300	21/24dB	1.5	5
	palmOTDR-S20AE	palmOTDR-S20AE-VPSI	1310/1550	32/30dB	1.8	5
	palmOTDR-S20BE	palmOTDR-S20BE-VPSI	1310/1550	35/34dB	1.5	5
	palmOTDR-S20C/N	palmOTDR-S20C/N-VPSI	1310/1550	40/38dB	0.8	4.5
	palmOTDR-S20D/N	palmOTDR-S20D/N-VPSI	1310/1550	45/43dB	0.8	4.5
	palmOTDR-S20F	palmOTDR-S20F-VPSI	1310/1550	50/48dB	0.8	4.5
	palmOTDR-S20C/P	palmOTDR-S20C/P-VPSI	1310/1490/1550	38/37/37dB	0.8	4.5
	palmOTDR-S20C/X	palmOTDR-S20C/X-VPSI	1310/1550/1625 <sup>(4)</sup>	38/37/37dB	0.8	4.5
	palmOTDR-P11C	palmOTDR-P11C-SI	1625 <sup>(4)</sup>	37dB	0.8	4.5
	palmOTDR-P31C	palmOTDR-P31C-SI	1310/1550/1625 <sup>(4)</sup>	38/37/37dB	0.8	4.5
	palmOTDR-Q40A	palmOTDR-Q40A-VPSI	850/1300/1310/1550	21/24/32/30dB	1.5	4.5
Selectable Range (Km)	0.1, 0.3, 0.5, 1.3, 2.5, 5, 10@850nm; 0.1,0.3,0.5,1.3,2.5,5,10,20,40,80@1300nm; 0.3, 1.3, 2.5, 5, 10, 20, 40, 80, 120, 160, 240@others					
Pulse Width	10ns, 30ns, 100ns, 300ns, 1µs@850nm; 10ns, 30ns, 100ns, 300ns, 1µs, 2.5µs@1300nm; 5ns, 10ns, 30ns,100ns, 300ns, 1µs,2.5µs, 10µs, 20µs@others					
Averaging Time	Quick, 15s, 30s, 1min, 2min, 3min					
Distance Measure Accuracy	±(1m+5×10 <sup>-5</sup> ×distance+sampling space)					
Attenuation Detect Accuracy	±0.05dB/dB					
Reflection Detect Accuracy	±4dB					

Data Storage	1000 records
Connectivity	USB
Connector	FC/PC (Interchangeable SC, ST; optional LC)
Power Supply	NiMH Battery / AC Adapter
Battery Life	8 hrs continuous operation, 20 hrs standby (on one charge); recharging time < 4 hrs
Operating Temperature	-20°C to 50°C
Storage Temperature	-40°C to 70°C
Relative Humidity	0 to 95% (non-condensing)
Weight	1kg (2.2 lbs)
Dimensions (HxWxT)	220x110x70mm (8.7x4.3x2.7 inch)

## Functional Module Specifications

### Visible Fault Locator Module<sup>(5)</sup>

Wavelength ( $\pm 20\text{nm}$ )	650nm
Output Power (dBm)	$\geq -3$
Max Measurement Range	5 Km

### Stabilized Laser Source Module<sup>(5)</sup>

Wavelength ( $\pm 20\text{nm}$ )	Same as OTDR working wavelength <sup>(5)</sup>
Output Power (dBm)	$\geq -7$

### Optical Power Meter Module<sup>(5)</sup>

Calibrated Wavelength (nm)	850,1300,1310,1490,1550,1625
Power Range (dBm)	-70 to +6 (-60 to +6 @ 850nm)
Detector Type	InGaAs
Display Resolution	0.01dB
Accuracy	$\pm 5\% \pm 0.01\text{nW}$ ( $\pm 0.5\text{dB}$ @850nm)
MOD Identification	1K, 2K Hz

### PON Power Meter Module<sup>(6)</sup>

Calibrated Wavelength	1310nm	1490nm	1550nm
Measurement Range (dBm)	-40 to +8 (Burst mode: -30 to +8)	-40 to +8	-40 to +20
Spectral Passband (nm)	1310 $\pm$ 40	1490 $\pm$ 10	1550 $\pm$ 10
Power Uncertainty (dB)	$\leq 0.5$		
Display Resolution (dB)	0.01		
Insertion Loss (dB)	$\leq 1.5$		
Threshold	60 user-definable threshold sets		
Data Storage	1200 records		

MCI100 Optical Connector Inspector Module	
Zoom	250X
Resolution	0.75µm
Focus	Manual
Adaptor	Standard: 25-U-M: FC/SC/ST/E2000 UPC male; 125-U-M: LC/MU UPC male; 25-U-F: FC/SC/ST/E2000 UPC female; LC-U-F: LC UPC female; Optional: 125-A-M: LC/MU APC male; 25-A-M: FC/SC/ST/E2000 APC male; SC-A-F: SC APC female; FC-A-F: FC APC female; LC-A-F: LC APC female;
Weight / Size	150g/ 165x38x35mm

\* Specifications subject to change without notice

#### Notes:

- (1) Specifications describe the instrument's warranted performance, measured with typical PC-type connectors. Uncertainties due to the refractive index of fiber are not considered.
- (2) The dynamic range is measured at maximum pulse width and averaging time of 3 minutes.
- (3) Conditions for dead zone measurement: Reflection event is at 0.6Km, reflection intensity is less than -45dB, event dead zone is measured with pulse width of 10ns; attenuation dead zone is measured with pulse width of 10ns.
- (4) 1625nm can be replaced by 1650nm.
- (5) Visible fault locator module, Stabilized laser source module and Optical power meter module is standard on -VPSI models. Stabilized laser source shares palmOTDR optical port and work on the same working wavelength of palmOTDR.
- (6) PON power meter module is standard on P11C and P31C.

## Order Information

#### Standard Package Includes:

Instrument, FC/PC connector, NiMH battery, TraceManager software CD, USB Data cable, AC adaptor, Soft carrying case, Warranty card, Certificate of calibration, Quick reference guide.

#### Options:

- palmOTDR-XXXX-VPSI: Visible Fault Locator module, Optical Power Meter module, Stabilized Laser Source module and Optical Connector Inspector Module for palmOTDR
- MCI100 Module: Optical Connector Inspector
- LM100 Function: LinkImage software

