## palmOTDR Series Handheld OTDR



### **Most Compact High-Performance OTDR**

 Comprehensive fiber applications, ideal for LAN/WAN/FTTx

certification & trouble-shooting:

SM: 1310/1490/1550, 1625/1650nm (with filter), up to 50dB

MM: 850/1300nm, 21/24dB

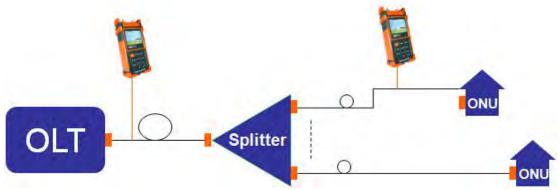
- Fault locating, fiber length/loss measurement, connector/ splice/ splitter/ macro bend/fiber-end detection
- Built-in PON Power Meter for Triple-play live measurement
- Optional Stabilized Laser Source, SM/MM Power Meter and VFL
- FTTx in-service testing/ Testing through splitter: (1625/1650nm with 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</p>
- Perfect user interface, handheld & lightweight (1kg)
- Hotkeys: Easiest operation in the world, push-and-test
- 1000 test records storage
- Bellcore 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



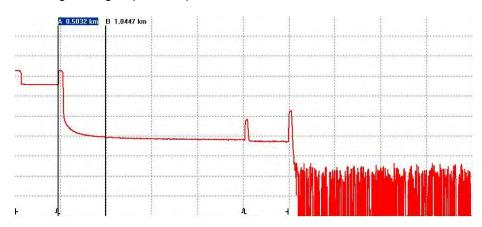
The compact palmOTDR now offers even more testing capacities, flexibility and value with combination of 850/1300/1310/1490/1550/1625/1650nm (Mono/double/triple wavelength) OTDR, 1310/1490/1550nm PON Power Meter, Stabilized Laser Source and VFL. The OTDR wavelengths cover the applications of regular end-to-end 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.

#### **In-Service Testing (Through Splitter)**

In-service testing (1625nm with filter)



Testing through splitter, splitter and fiber end identifiable

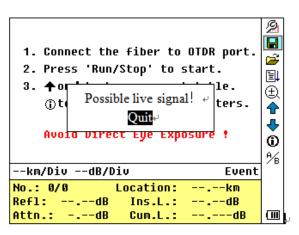


#### **Live Optical Signal Check**

When 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 equipments connected to the network (SDH/WDM/PON) and OTDR receiver. 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 equipments.

#### **Built-in PON Power Meter**

The integration of PON Power Meter into such a small unit of palmOTDR makes FTTx certification and troubleshooting an exciting experience and efficient work. 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.

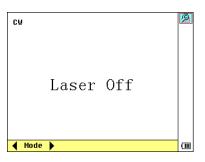






#### **Extended Stabilized Laser Source**

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



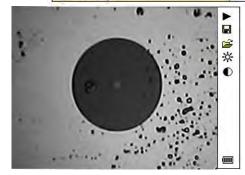
#### **Extended Optical Power Meter**

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

# CW 1310nm Ref:-10.00dBm Low dBm

# **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.)

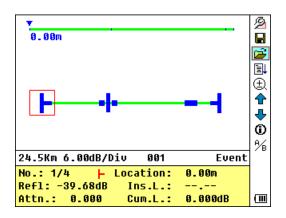


#### **Optimized Interface design**

- Graphical User Interface
- Color and High Resolution



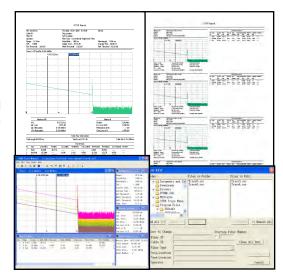
#### **OTDR LinkImage Software**



#### **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	Dynamic	EDZ	ADZ
Basic	Advanced	(±20nm)	Range <sup>(2)</sup>	(m) <sup>(3)</sup>	(m) <sup>(3)</sup>
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	8.0	4.5
palmOTDR-S20F	palmOTDR-S20F-VPSI	1310/1550	50/48dB	8.0	4.5
palmOTDR-S20C/P	palmOTDR-S20C/P-VPSI	1310/1490/1550	38/37/37dB	8.0	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
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		±0.05 dB/ dB			
Reflection Detect Accuracy		±4 dB			
Data Storage		1000 records			

Connectivity	USB	
Connector	FC/PC(Interchangeable SC, ST)	
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 ~ 50°C	
Storage Temperature	-40°C ~ 70°C	
Relative Humidity	0~95% (non-condensing)	
Weight	1kg (2.2 lbs)	
Dimensions (H×W×T)	220×110×70mm (8.7×4.3×2.7 inch)	

# **General Specifications**

**Functional Module Specifications** 

Visible Fault Locator Module <sup>(5)</sup>					
Wavelength (±20nm)	650nm				
Output Power (dBm)	≥-3				
Max Measurement Range	5 Km				
Stabilized Laser Source Module <sup>(5)</sup>					
Wavelength (±20nm)	Same as OTDR working wavelength <sup>(5)</sup>				
Output Power (dBm)	≥-7				
Optical Power Meter Mod	ule <sup>(5)</sup>				
Calibrated Wavelength (nm)	850,1300,1310,1490,1550,1625				
Power Range (dBm)	-70 ~ +6 (-60 ~ +6 @ 850nm)				
Detector Type	InGaAs				
Display Resolution	0.01dB				
Accuracy	± 5% ± 0.01nW (±0.5dB@850nm)				
MOD Identification	1K, 2K Hz				
PON Power Meter Module	(6)				
Calibrated Wavelength	1310nm	1490nm	1550nm		
Measurement Range (dBm)	-40 ~ +8 (Burst mode: -30 ~ +8)	-40 ~ +8	-40 ~ +20		
Spectral Passband (nm)	1310±40	1490±10	1550±10		
Power Uncertainty (dB)	≤ 0.5				
Display Resolution (dB)	0.01				
Insertion Loss (dB)	≤ 1.5				
Threshold	60 user-definable threshold sets				

Data Storage	1200 records			
MCI100 Optical Connector Inspector Module				
Zoom	250X			
Resolution	0.75µm			
Focus	Manual			
Adpator	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/ 165×38×35mm			

<sup>\*</sup> 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.

#### **Ordering 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

#### For More Information:



#### Vicom Australia

1064 Centre Rd Oakleigh South Vic 3167 Australia 1300 360 251 info@vicom.com.au www.vicom.com.au

#### Vicom New Zealand

Grd Floor, 60 Grafton Road Auckland 1010 New Zealand +64 9 379 4596 info@vicom.co.nz www.vicom.co.nz