
1 Product introduction

1.1 Product overview

Optical fiber communication is becoming an important pillar of the modern communication network, presenting increasingly stricter requirements for the construction, tests and maintenance of optical fiber links. As a product especially designed for the routine maintenance, fault finding and urgent repair of optical fiber links by engineers and designers, PalmOTDR provides a completely new application mode for optical fiber communication network testing through its original design. Compared with conventional OTDR products, it is smaller and more convenient in use. It is widely used in the construction, testing, maintenance and urgent repair of optical fiber communication systems, the development, production and testing of optical fiber fibers and cables, etc.

With a handheld structure, the instrument is small, light and portable. It displays event information on its TFT color display and can save data. Through a USB interface, it can upload test data to a PC for later processing, saving and printing.



Performance features

- ▶ **Palm type ensuring a light weight and easy carrying; shock and drop resistant sheath suitable for field measurements and on-site measurements**

- ◇ **Simple and user-friendly key design: In key operation, hotkey function, quick locating and event analysis points are integrated.**

- ◇ **Three-second starting: A measurement can be done immediately after start.**

- ◇ **Intelligent testing: It ensures simple operation and great functions.**

- ◇ **Optical alarming function: The incoming light at the optical port can be automatically tested and protected.**

- ◇ **Optional large-capacity SD card for the system: It can save 1 000 test waveforms at most.**

- ◇ **Low power consumption design: The product can be powered by a lithium battery or a dry battery.**

- ◇ **Simple operation and interfaces: Complicated trainings are not needed.**

- ◇ **VFL (visual fault locating) function**

- ◇ **Special supporting software: OTDR Viewer that can analyze and edit curves through PCs.**

Range of application

▶ **Construction and maintenance of telecommunication projects**

Construction and maintenance of CATV projects

Generic cabling system

Production and research of optical devices

Other optical fiber projects

1.2 Technical data

Technical specification ①	
Model	OTDR
Wavelength (nm)	1310/1550
Dynamic range (dB) ②	28/26
Pulse width (ns) ⑤	10/20/50/100/200/500/1000/2000/5000/10000/20000
Event dead zone (m) ③	1.8
Attenuation dead zone (m) ③	10
Linearity (dB/dB)	±0.05
Loss threshold (dB)	0.01
Loss resolution (dB)	0.01
Sampling resolution (m) ⑥	0.16~5
Sampling point	24K
Uncertainty of distance (m) ④	± (1m+0.005% × distance + sample interval)
Distance range (Km)	1~120
Curve saving capacity	10000 pcs
Measuring duration	5s, 15s, 30s, 1min, 2min and 3min

General specification	
Dimensions (H×W×D)	210× 112× 67
Weight	1kg
Temperature	Operating temperature: 0℃~50℃
	Storage temperature: -20℃~60℃
Relative humidity	0% ~95% (non-condensing)
Power supply	Lithium battery; continual operating time ≥8h (with optical ordinary dry batteries)

Interface type	
Optical interface	FC (ST/SC)/PC
Data interface	USB interface and SD card interface

Optional function modules	
VFL module	Wavelength: 650nm Maximum measuring distance: 5Km

- ① The technical data describe the guaranteed performance of the instrument in the measurements based on typical FC connectors. They are not based on the uncertainty due to the optical fiber index of refraction.
- ② The dynamic range (SNR) of 1 is measured based on the maximum pulse width and a mean time of 3 minutes.
- ③ Dead zone measurement conditions: The reflection strength is smaller than -45dB; the pulse width is 10ns for event dead zone measuring, or 50ns for attenuation dead zone measuring.
- ④ The uncertainty due to the index of refraction is not considered.
- ⑤ Different product, maybe different Pulse Width (300B Pulse Width: 10/20/50/100/200/500/1us/2us)
- ⑥ Different Spec,different Sample point
- ⑦ If index or operation changed due to any software updating,please forgive us that do not inform you