Techwin (China) Industry Co., Ltd

The Perfect Handhold Tester Series

OTDR TW2000

Description

TW2000 palm OTDR is the newest instrument designed for testing FTTx network. It's mainly used to measure the physical characteristics of optical fiber under test, such as the length、the transmission loss and the splice loss etc.. It can also locate the faults or breaks of optical fiber. It's widely applied in the manufacture, construction and maintenance in optical fiber communication system.

TW2000 palm OTDR has the most advanced technology of double-color & material integrative mould, which is novel and beautiful in appearance. TW2000 offers three wavelengths and VLF in one handheld unit, especially for testing passive optical network (PON) in FTTx. In addition, it's equipped with comfortable gallus for carrying conveniently.

Mainly Features:

♦ handheld、lightweight and convenience for carrying

♦ The most advanced technology of

double-color & material integrative mould in trade

♦ Advanced anti-reflective TFT LCD,visible

clearly in field

♦ 1.6m extra-short event dead zone

♦ 0.25m high resolution, 65535 sampling

points

♦ Fast auto measurement,one-button operating

♦ Double USB interfaces, supporting USB stick and direct cable download to PC via

ActiveSync

♦ Supporting Bellcore GR196 file format in writing or reading
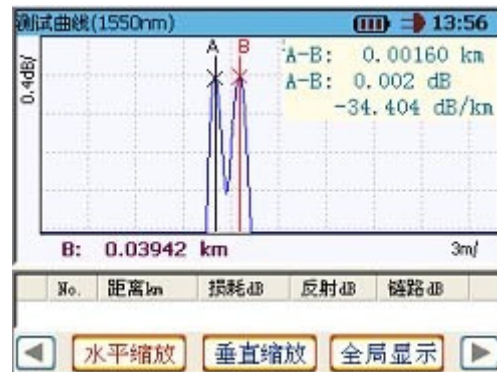
♦ Function of intelligent indicating of remaining capacity of battery and warning if the voltage of battery is low.

♦ WinCE operation system, double operating interface of Chinese and English

♦ Built-in lithium battery with high capacity for over 10 hours of operating life

♦ Visible fault locating (VFL)

♦ Universal FC/PC,FC/SC,FC/ST connector type, it's convenient for surface cleaning

♦ Unique function of updating system on-line, returning to factory is unnecessary

♦ **Extra-short Event Dead Zone**

 TW2000 palm OTDR has extra-short event dead zone, which is suitable for testing short optical fiber and pigtail optical fiber.

1. 接入光纤

2. 按下测试按钮

♦ **High-Speed Auto Measurement**

The function of auto measurement of   TW2000 palm

OTDR makes it unnecessary to operator to know about the

further details of operating. Simply connect the fiber, press [Start],then the result is displayed in a few seconds, you can view the trace and event table.

♦ **High-Speed Auto Analyzation**

 TW2000 can search and locate the events and faults in trace rapidly and precisely, and then lists all events in even table, so it's very useful to maintainers to improving efficiency and it's unnecessary to know about the relative background knowledge.

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♦ **Strong File Management**

TW2000 offers powerful function of file management. Besides saving、browsing or deleting files to or from USB stick and built-in memory, it can be connected to laser or inkjet printer based on PCL language, and the testing report can be printed rapidly and easily. In addition, TW2000 can communicate with PC using ActiveSync via USB cable, through which the files can be translated rapidly.
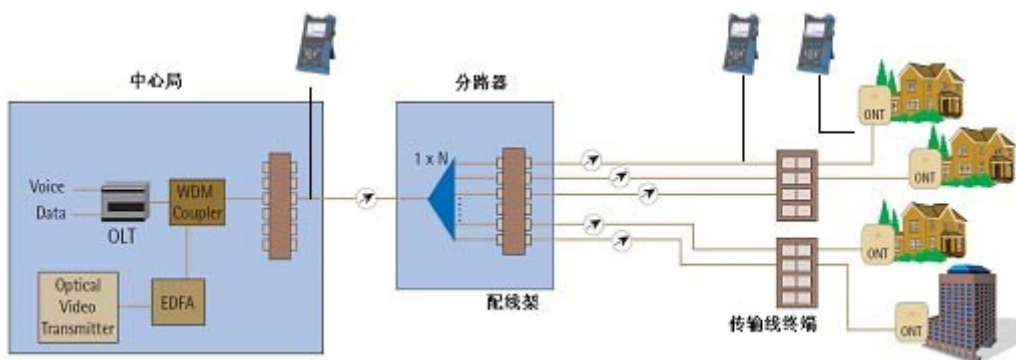

♦ **Convenient VFL**

The built-in 650nm visual fault location is ideal for easily identifying bad splice, bad connector, break or macro bend.

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♦ **Application:**

TW2000 Palm OTDR is mainly used to measure FTTx network, it provides a low cost solution for users. TW2000 offers three measuring modes: manual mode (including real time mode and average mode), auto mode and dead zone mode.

Manual measurement mode: manual mode is suitable for skilled operator who is familiar with the instrument. In this measurement mode, to get more accurate results, real-time mode or average mode can be selected if necessary. In real-time mode, the dynamic changes of fiber chain can be detected timely, it is very useful when you need to watch the effect and process of fiber being

spliced or connected.

In average measurement mode, the noise in trace can be suppressed, and the SNR(signal noise ratio) is improved, therefore，the result is more accurate. In fact, the more average times is executed, the more noise in trace is suppressed, and the longer time is spent for signal processing. In practice, the average times should be set properly according to necessity.

Auto measurement mode: the optimized measurement conditions are set automatically, it's unnecessary to operator to know about the complicated background knowledge and the further details of operating. In this mode, the more accurate results can be gained when proper average times are set, but it will increase the time of signal processing.

Dead zone mode: this mode is suitable for testing optical fiber with short distance and the optimized settings of distance range, pulse width and attenuator can be executed automatically. To get the best result, the terminal return loss should be guaranteed less than -40dB.

Specifications:

MODULE	3528	5626	3428
wavelength	1310nm/1550nm ±20nm	1550nm/1625nm ±20nm	1310nm/1550nm/1490nm ±20nm
Applicable Fiber	Single-mode		
Dynamic Range[1]	28/26dB	26/24dB	28/26/24dB
Distance Measurement Accuracy	±(1m + sample space + 0.003% * measurement distance)		
Event Dead Zone[2]	≤1.6m		
Sampling Resolution	0.25, 0.5, 1, 2, 4, 8, 16m		
Distance Range	4, 8, 16, 32, 64, 128, 256km		
Pulse width	10, 30, 80, 160, 320, 640, 1280, 5120, 10240ns		
Loss threshold	0.01dB		

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Sampling points	65534
Linearity	0.05dB/dB
Memory capacity	≥800 Traces
IOR setting	1.00000~2.00000
Display	Color LCD (touch screen)
Interface	USB, Min-USB
VFL	650nm±10nm, 2mW(typical); CW/1Hz
Language	Simple Chinese/English
Optical Connector	FC/UPC (universal connector)
Power Supply	DC:15V~20V(3A), (AC adapter 100~240V,50/60Hz,1.5A),Built-in Lithium battery：4400mAh,7.4V,operating time≥10 hours3[3]
Dimensions	210mm*100mm*60mm
Weight	about 1kg

Note1：pulse width 10240ns, average times≥300，SNR=1，23℃±2℃;

Note2：Pulse width:10 ns, terminal reflection loss: ≥40dB, typical;

Note3：Low brightness, exclude measuring.

♦ **Ordering Information**

Main Frame: TW2000 Palm OTDR

Standard Sccessories:

NO.	Name	quantity
1	Power line	1
2	AC/DC adapter	1
3	Quality certification	1
4	User manual	1
5	Trace analyzing software (CD)	1
6	Hard Carrying case (Including gallus)	1

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7	Special gallus of instrument	1

Standard Module: The available modules of TW2000 palm OTDR are shown as following:

Ordering number	Operating wavelength	Optical fiber type	Dynamic range
TW2000-5626	(1550nm/1625nm)±20nm	SMF	26/26dB
TW2000-3528	(1310nm/1550nm)±20nm	SMF	28/26dB
TW2000-3428	(1310nm/1550nm/1490nm)±20nm	SMF	28/26/24dB
Note：One and only one module of above must be selected.			

Options

No.	Name	Type	Note
1	USB stick		Saving measuring data
2	Printer	Hp LJ P2015d or Hp LJ 1022	Printing traces
3	USB cable		Communicating with PC
4	Soft carrying case with nylon material		Carrying case
5	Standby battery pack	Special battery pack for TW2000 palm OTDR	Standby battery
6	FC/SC，FC/ST connectors		
Note：For the necessity of improvement, the material contained in this document is subject to change without notice.			