

## AV6416 Handheld OTDR

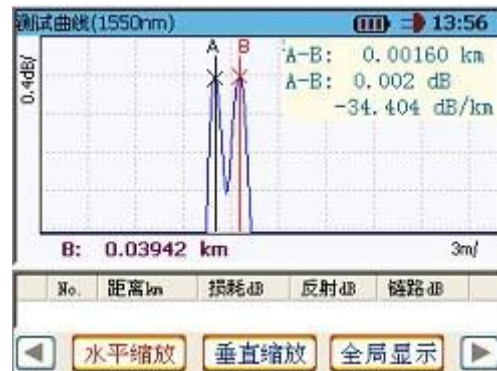
**Product Summarizations:** AV6416 palm OTDR is the newest instrument designed for testing FTTx network. It's mainly used to measure the physical characteristics of optical fiber under test, such as the length, the transmission loss and the splice loss etc.. It can also locate the faults or breaks of optical fiber. It's widely applied in the manufacture, construction and maintenance in optical fiber communication system.

AV6416 palm OTDR has the most advanced technology of double-color & material integrative mould, which is novel and beautiful in appearance. AV6416 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 gullus 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**

AV6416 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 AV6416 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**

AV6416 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.



◆ **strong file management**

AV6416 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, AV6416 can communicate with PC using ActiveSync via USB cable, through which the files can be translated rapidly.



◆ **Convenient VFL**

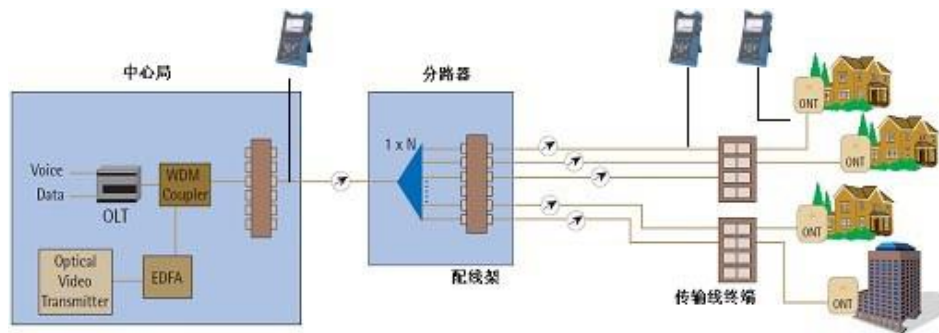
The built-in 650nm visual fault location is ideal for easily identifying bad splice, bad connector, break or macro bend.



◆ **Communication Light Check**

When measuring a fiber in service, the measuring result by an OTDR is not precise. To avoid the imprecision of measurement, this check function checks for the presence of light other than the OTDR optical measurement pulse.

◆ **Application:**



AV6416 Palm OTDR is mainly used to measure FTTH network, it provides a low cost solution for users. AV6416 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	2101	2103	3105	3102
wavelength	1310nm/1550nm ±20nm	1550nm/1625nm ±20nm	1310nm/1550nm/1490nm ±20nm	1310nm/1550nm/11625nm ±10nm
Applicable Fiber	Single-mode			
Dynamic Range <sup>1</sup>	28/26dB	26/24dB	28/26/24dB	28/26/25
Distance Measurement Accuracy	±(1m + sample space + 0.0025% * measurement distance)			
Event Dead Zone <sup>2</sup>	≤1.6m			
Sampling Resolution	0.25, 0.5, 1, 2, 4, 8, 16m			
Distance Range	0.5,1,2,4, 8, 16, 32, 64, 128, 256km			
Pulse width	10, 30, 80, 160, 320, 640, 1280, 5120, 10240ns			
Loss threshold	0.01dB			
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 hours <sup>3</sup>			
Dimensions	210mm*100mm*60mm			
Weight	about 1kg			

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

Note2: Pulse width:10 ns, terminal reflection loss:  $\geq 40$ dB, typical;

Note3: Low brightness, exclude measuring.

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