Product Summaries :

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 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, 65534 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.
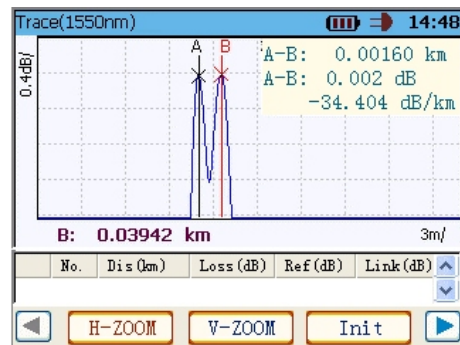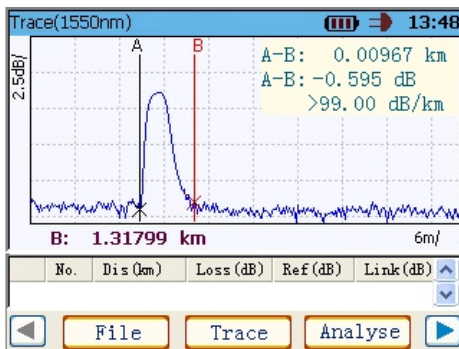
high-speed auto measurement

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.

① Connect the fiber

① Connect the fiber

② Press [Start]

③ Trace and events table

② Press [Start]

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.
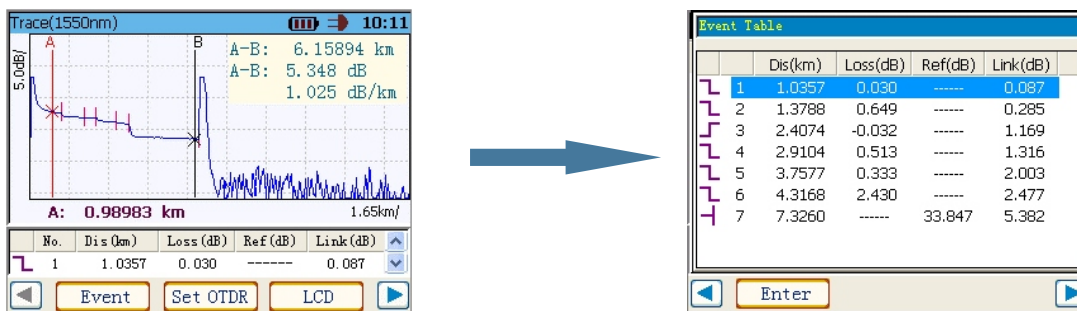
High-speed auto analyzation

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.
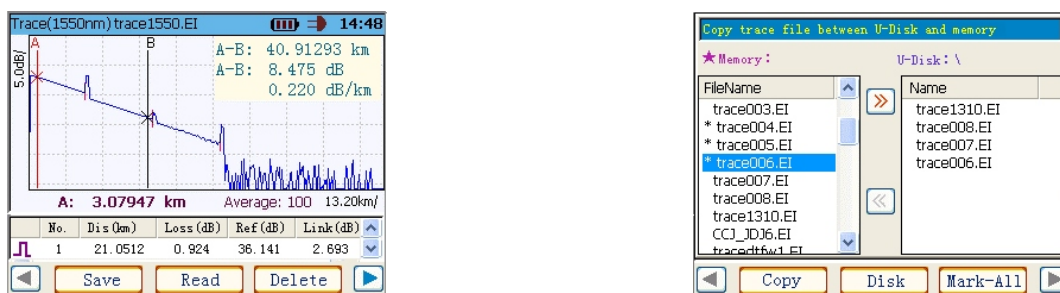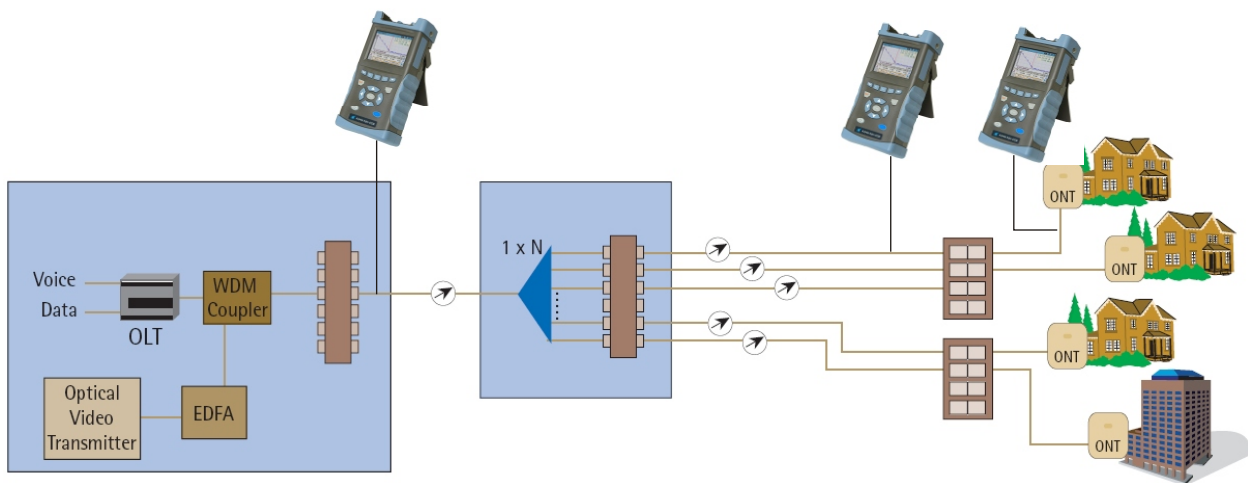

File management and transmission

Grandway ®
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Convenient VFL

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

Application :

AV6416 Palm OTDR is mainly used to measure FTTx 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 observe 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.

Convenient VFL

Main Specifications			
Dynamic Range[1]	1310nm/1550nm	1550nm/1625nm	1310nm/1550nm/1490nm
	±20nm	±20nm	±20nm
	28/26dB	26/24dB	28/26/24dB
Event Dead Zone[2]	≤1.6m		
Applicable Fiber	Single-mode		
Distance Range	4, 8, 16, 32, 64, 128, 256km		
Sampling Resolution	0.25, 0.5, 1,2, 4, 8, 16m		
Pulse width	10,30,80,160,320,640,1280,5120,10240ns		
Sampling points	65534		
Distance Measurement Accuracy	±(1m+sample+spacemeasurement distance×0.003%)		
Loss threshold	0.01dB		
Linearity	0.05dB/dB		
Memory capacity	800 traces		
Group refractive index 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		
Dimensions	210×100×60(mm)		
Weight	1 kg		

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

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

Note3: Low brightness, exclude measuring.

Ordering information:

Main frame

AV6416 Palm OTDR

Standard accessories

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
7	Special gallus of instrument	1

Main frame

The available modules of AV6416 palm OTDR are shown as following:

Ordering number	Operating wavelength	Optical fiber type	Dynamic range
AV6416-5626	(1550nm/1625nm)±20nm	SMF	26/26 dB
AV6416-3528	(1310nm/1550nm)±20nm	SMF	28/26 dB
AV6416-3428	(1310nm/1550nm/1490nm)±20nm	SMF	28/26/24 dB

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 laser Jet P2015d or Hp laser Jet 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 AV6416 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.

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