AV6416 : Palm OTDR

Details

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.

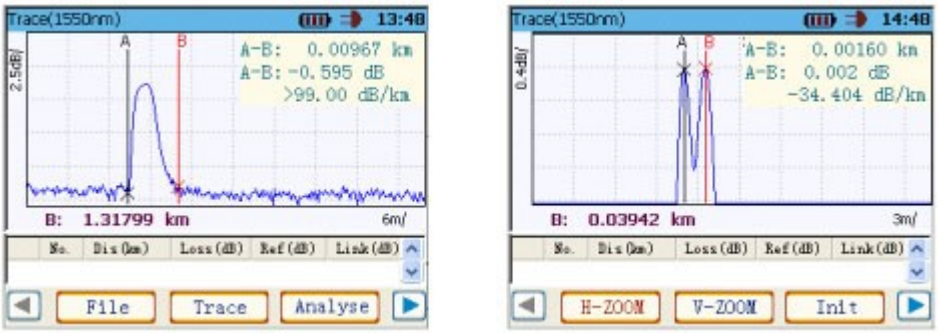
AV6416 palm OTDR has the most advanced technology of double-color & material integrative mould,which is novel and beautiful in appearance.AV6416 offers three wavelengths and VLF in one handheld unit, especially for testing passive optical network (PON) in FTTx. In addition, it´s equipped with comfortable gallus for carrying conveniently.

Mainly features:

o handheld,lightweight and convenience for carrying
o The most advanced technology of double-color & material integrative mould in trade
o Advanced anti-reflective TFT LCD,visible clearly in field
o 1.6m extra-short event dead zone
o Communication light check automatically
o 0.25m high resolution,65534 sampling points
o Fast auto measurement,one-button operating
o Double USB interfaces, supporting USB stick and direct cable download to PC via ActiveSync
o Supporting Bellcore GR196 file format in writing or reading
o Function of intelligent indicating of remaining capacity of battery and warning if the voltage of battery is low.
o WinCE operation system, double operating interface of Chinese and English
o Built-in lithium battery with high capacity for over 10 hours of operating life
o Visible fault locating (VFL)
o Universal FC/PC,FC/SC,FC/ST connector type, it´s convenient for surface cleaning
o Unique function of updating system on-line, returning to factory is unnecessary

o 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.

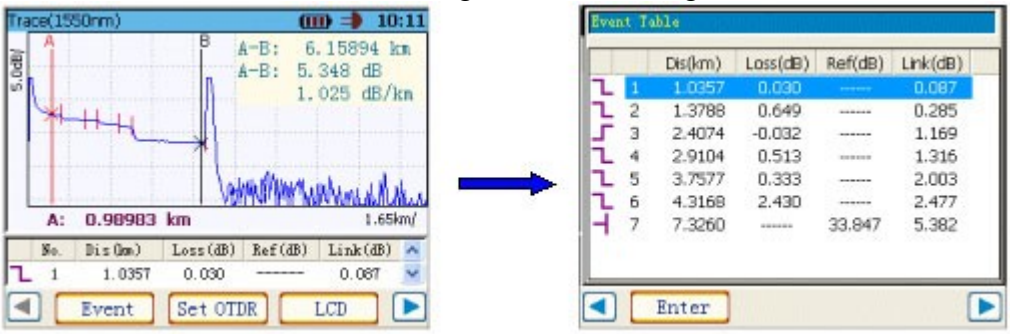


o High-speed auto measurement

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.

o 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.



o Powerful 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.

File management and transmission

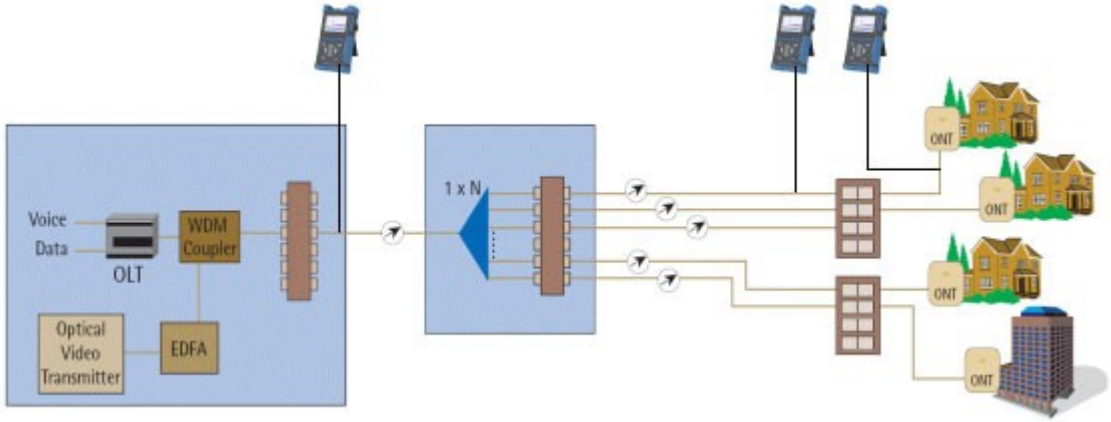
o Convenient VFL

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

o Communication light check

When measuring a fiber in service, the measuring result by an OTDR is not precise, and there is a potential risk of permanent damage to the internal photoelectric of OTDR receiver. To prevent these problems, the AV6418 OTDR can detect automatically and silently if communication light is present after the fiber under test is connected, once the light is verified present, simultaneously, a warning message will be displayed and internal OTDR protection will be active instantly.

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.

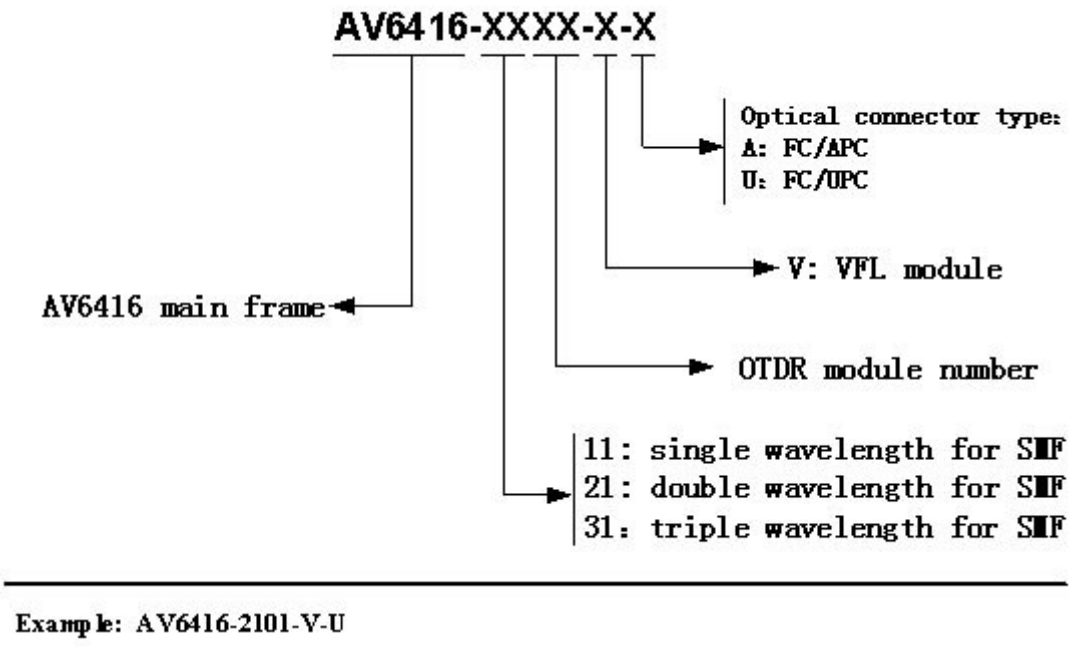
Specifications

Main Specifications				
Main OTDR Modules	2101	2103	3105	3102
Center wavelength	1310nm/1550nm ±20nm	1550nm/1625nm ±20nm (build-in filter)	1310nm/1550nm /1490nm±20nm	1310/1550nm/ 1625nm ±10nm (build-in filter)
Type of optical fiber	SMF	SMF	SMF	SMF
Dynamic Range[1]	28 / 26dB	26 / 26dB	28 / 26 / 24dB	28 / 26 / 25
Distance Measurement Accuracy	±(1m + sample space + measurement distance×0.003%)			
Event Dead Zone[2]	≤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	Up to 65k
Linearity	0.05dB/dB
Memory capacity	800 traces
Group refractive index setting	1.00000 - 2.00000 (0.00001 steps)
Display	Color LCD(touch screen)
Interface	USB,Min-USB
Optical Connector	FC/UPC (universal connector)
VFL	650nm ± 10nm,2mW(typical);CW/1Hz
Language	User selectable : simplified Chinese, English, Russian, Korean etc.. (please contact CETC 41st for others)
Power Supply	DC:15V to 20V(3A),(AC adapter 100 ~ 240V, 50/60Hz,1.5A), Built-in Lithium battery:4400mAh,7.4V,operating time≥10 hours[3]
Dimensions	210×100×60(mm)
Weight	1 kg Approx.

Note 1:pulse width 10240ns, average times≥300,SNR=1,23℃±2℃;
Note 2:dead zone mode, distance range : ≤ 4km, pulse width:10 ns, terminal reflection loss:≥40 dB, typical;
Note 3:low brightness, exclude measuring.

Ordering information:



o Main frame
AV6416 Palm OTDR
o 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

Note: the standard OTDR interface type is FC/UPC.

o 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	Standby battery pack	Special battery pack for AV6416 palm OTDR	Standby battery
5	FC/SC,FC/STConnectors		

Note:For the necessity of improvement, the material contained in this document is subject to change without notice.

Unicor s.a.
Optical Access Networks - GEPON - Metro Ethernet
Zenon López 1594 ~ (5972) Pilar - Cordoba ~ Argentina
Tel.: 00 54 (3572) 470578 ~ e-mail: info@unicorsa.com.ar
www.unicorsa.com.ar