

# AE919 Series Multi Optical Tester

DEVISER®

AE919 Series Multi Optical Tester is presented by Deviser Instruments Ltd. in Tianjin at the end of 2017. As a new generation optical fiber network testing instrument, it adopts some new techniques such as high-speed processors and real-time analysis and processing. AE919 Series Multi Optical Tester caters to the fiber construction, deployment and maintenance in FTTH+IP and FTTH+RF and has exceptional test performance and high cost performance. AE919 Series has many models which support ONU test, FiberPath, IPTV test, and Digital/Analog field strength test (QAM). It also supports various accessories such as OPM, VFL, PON OPM and TDR.

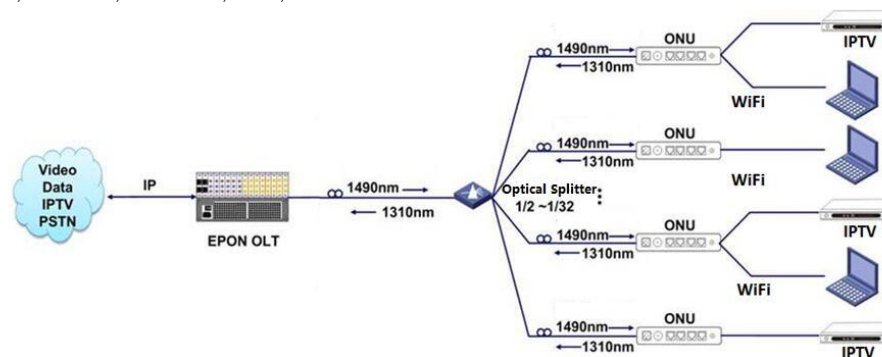
## Key Features

- 5 inch touch screen and 800×480 dot array high resolution
- Compact Mini design, lighter, thinner and smaller
- Support FTTH+IP Test, IPTV, ONU Test, FiberPath
- Support FTTH+RF Test, FiberPath, QAM Test, ONU Test, TDR Test
- Various accessories are optional: PON optical power meter (PON OPM), Visual Fault Locator (VFL), Optical Power Meter (OPM), Light Source (LS)
- Complete data interfaces such as LAN, USB, and so on

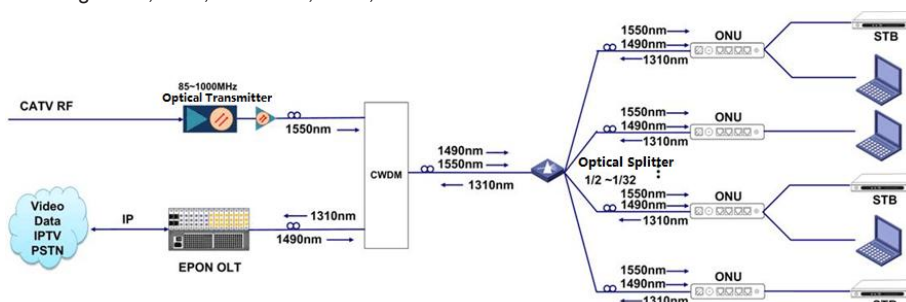


## Applications

- Construction, deployment, and maintenance of FTTH+IP network.  
IPTV Test, ONU Test, FiberPath, PON OPM, OPM, VFL



- Construction, deployment, and maintenance of FTTH+RF network.  
Digital/Analog field strength test, TDR, FiberPath, OPM, VFL.



### Model Definition

Configured function			FTTH+IP			FTTH+QAM		
			AE919A	AE919B	AE919C	AE919D	AE919E	AE919F
Optical Layer	1	FiberPath	□	■	■	□	■	■
	2	PON OPM	■	■	■	■	■	■
	3	VFL@650nm	■	■	■	■	■	■
	4	LS	×	□	■	×	□	■
	5	OPM	□	□	□	▲	▲	▲
	6	Seeker	×	□	■	×	□	■
Protocol Layer	7	Speed Test	■	■	■	■	■	■
	8	ONU(Basic)	■	■	■	■	■	■
	9	IPTV Index	×	×	■	×	×	×
RF Layer	10	Digital/Analog Field Strength Test	×	×	×	■	■	■
	11	TDR	×	×	×	▲	▲	▲

Standard : ■ / Either-Or : ▲ / Optional : □ / None : ×

### Technical Specifications

General Parameters	
Display	5in ( mm ) 800×480 dot array, TFT touch screen
Interface	USB2.0 ×1 , USB power supply DC5V±0.05V@500mA ; RJ45×1LAN 10M/100M/1000M
Storage	8G SD card
Dimensions ( L×W×H )	179mm×144.7mm×54mm
Weight	< 1kg
Operating Temperature	-10°C~+50°C
Storage Temperature	-40°C~+70°C
Relative Humidity	0%-95% non-condensing

Option—OPM		
Power Range	-70dBm~+10dBm	
Calibrated Wavelength	1310 nm/1550nm	
Operating Wavelength	850nm/980nm/1300nm/1310nm/1490nm/1550nm/1610nm/1625nm/1650nm	
Accuracy	±0.17dB	
Option—FiberPath		
Technical Parameter	Operating Wavelength	( 1550±20 ) nm
	Dynamic Range <sup>c</sup>	≥25dB
	Event dead zone <sup>d</sup>	≤5m
	Attenuation dead zone <sup>e</sup>	≤10m
Other	Distance Range	30m~30km
	Distance Unit	km, mille feet, mile
	Connector	SC/PC SC/APC ST LC
Option—Seeker <sup>f</sup>		
Operating Wavelength	1550nm	
Detectable fiber length	≤100km	
Interface	Non-contact	
Display Type	Speaker, led, and earphone	
Power	Two of No.7 alkaline batteries	
Option—Laser <sup>f</sup>		
Operating wavelength	1550nm	
Output Power	-11dBm	
Output Mode	CW/1kHz/2kHz/1kHz+Flash/2kHz+Flash	
Option—QAM		
Frequency Parameter	Frequency Range	5MHz-1050MHz
	Accuracy	±50×10 <sup>-6</sup> ( 20°C±5°C )
	Received Bandwidth	280KHz
Analog TV Signal	Level Range	30dBμV~120dBμV
	Accuracy	±1.5dB
	Channel Scanning	Maximum 150 channels
Digital TV Signal	Power Level Range	30dBμV~110dBμV
	Accuracy	±2.0dB
	Symbol Rate	4MS/S-7MS/S
	Accuracy	±2dB
Option—TDR		
Test Object	75 ohm coaxial cable	
Test range	5m~1600m	
Test accuracy	±1% of current test range	
Resolution	Less than 1% of current test range	

GSpeed			
Interface Standard	10Base-T , 100Base-TX , 1000Base-T		
Framing Standard	IEEE802.3		
ONU			
Available Standard	EPON、 GPON		
Connector Type	SC/PC		
Operating Wavelength	Tx : 1310nm±50nm Rx : 1490nm±10nm		
Operating Rate	EPON : Tx : 1.25Gbps Rx : 1.25Gbps GPON : Tx : 1.244Gbps Rx : 1.244/2.488Gbps		
Launch Power	0.5 ~ 5dBm		
Receive Power	-28 ~ -8dBm		
PON OPM			
Operating Wavelength	1310nm	1490nm	1550nm
Power Range	CW	10~-45dBm	12~-45dBm
	Burst	8~-30dBm	
Insert Loss	<1.5dB		
Spectral Band ( nm )	1260 ~ 1360	1480 ~ 1500	1540 ~ 1560
Power Accuracy	< 0.5 dB <sup>a</sup>		
Return Loss ( dB )	-55 <sup>b</sup>		
Resolution	0.1dBm dB mW μW nW		
Connector Type	FC SC/PC or SC/APC		
VFL			
Output Wavelength	650 nm±10 nm		
Output Power	≥10mW		
Measuring Range	>10km		
Safety Standard	IEC 60825 -1: 2007		

a. Without connector's loss.

b. APC connector

c. Test Condition: 25°C±5°C, 20μs pulsewidth, 3 minutes average time, starting backscatter value SNR=1.

d. Test condition: 25°C±5°C, 5ns pulsewidth, non-saturated-reflective event.

e. Test condition: 25°C±5°C, 5ns pulsewidth, non-saturated-reflective event.

f. It should be ordered with FiberPath module and can not be individually selected.