

VT-42MPLAS Optical Time Domain Reflectometer

Optical Time Domain Reflectometer

VT-42MPLAS mini handheld OTDR meter is is a multi-functional optical measuring instrument, which integrates OTDR, event map, optical power meter, visual fault location, light source, optical loss test, cable line length / sequence test, cable tracking and other functions. It has touch screen and heys. It is the right assistant for optical cable construction, installation and maintenance, project acceptance and on-site repair.

Technical characteristics

- The meter optimally integrates the most necessary fiber optic cable testing and maintenance functions including OTDR/OPM/LS/OFR/VFL/OLT/Event Map and RJ45 network cable testing at the lowest cost.
- Event Map function: allows to build a map of optical path characteristics intelligently and automatically, requiring only one button operation. The map displays complete information about the components on the test cable route (welds, connectors, start points, end points...).
- The device has the ability to detect whether there is a signal on the optical path (helping technicians identify the optical path with a signal).
- The meter can be connected via USB to a PC to conveniently transfer result files to a computer, with support for the included measurement result file compilation software.
- The meter design is compact, sturdy, convenient and has an impact-resistant, dust-proof (IP5X), and waterproof (IPX2) case. Easy to carry and maintain.

- 4.3" color LCD touch screen with 800*480pixel resolution, allowing full screen display of measurement results. Comes with a nice, compact, shockproof carrying bag for the meter.
- Short startup time, less than 10 seconds. Fast measurement time with just one press, automatically giving measurement results after 5 seconds. Optional support for measurement results after 5s; 15s ... 180s.
- The meter supports multi-function probes compatible with SC/UAPC or SC/APC standards, supporting conversion.
- Built-in high-capacity Lithium battery up to 5000 mAh, can use for 12 hours of continuous measurement and standby mode for more than 20 hours, with optional battery saving mechanism: screen turns off automatically after 10 minutes; 30'; 2min; 5min; 10min; not turned off. There is an automatic shutdown mode after: 5'; 15'; 30'; 60'; 120'; not turned off.
- Charge the battery using the USB Type-C port (similar to a common smart phone), extremely convenient for users.

Technical Specifications

Model VT-42MP LAS	OTDR				
Type		VT-42MP LAS			
Wavelength 1310nm/1550nm±20nm 29/27dB					
Dynamic Range 29/27dB		1310nm/1550nm±20nm			
Event Blind Zone ATT Blind Zone Bm Pulse Width 3ns/5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/500ns/80ns/100ns/200ns/300ns/500ns/80ns/1us/2us/3us/5us/8us/10us/20us Distance range 0.1/0.25/0.5/1.25/2.5/5/10/20/40/80/125/260km Distance unit Ranging Accuracy ± (1m + 3 x measuring distance x 10-5 + cursor resolution), (not including IOR error) Linearity ±0.05dB/dB Loss Threshold 0.001dB Sample Points ≥ 128k Sample Resolution Display span 0dB ~ 40dB Display resolution Refractive index 1.00000 ~ 2.00000 , in steps of 0.0001 (IOR Setting) Cursor resolution in approx Display resolution is ±0,01dB Data storage Storage : 8GB (≥20000curves) File Format : SOR Laser Safety Level Connector Distance measurement method LS Wavelength Consistent with OTDR Power [©] ≥-5dBm Mode CW/270/330/1kHz/2kHz Stability CW, ±0.5dB/15min OTDR port OPM Wavelength 800nm ~ 1700nm Test Range -50dBm ~ 26(CV, universet terreters)		29/27dB			
ATT Blind Zone		2.5m			
Pulse Width 3ns/5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/ 500ns/800ns/ 1us/2us/3us/5us/8us/10us/20us		8m			
Distance range		3ns/5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/			
Distance unit Ranging Accuracy £ (1m + 3 × measuring distance × 10-5 + cursor resolution), (not including IOR error) Linearity £ 0.05dB/dB Loss Threshold 0.001dB Sample Points £ 128k Sample Resolution Display span 0dB ~ 40dB Display resolution Refractive index Cursor resolution in approx Display resolution is approx Sampling resolution in approx Threshold -11 to -99 dB in 1 dB step Data storage Laser Safety Level Class II Connector Distance measurement method LS Wavelength Consistent with OTDR Power [©] 2-5dBm Mode CW/270/330/1kHz/2kHz Stability Cylec SC/BD C CW/270/330/1kHz/2kHz Lose Fequency Intertance of the standard of the st	. 4.50 17.44.1	500ns/800ns/ 1us/2us/3us/5us/8us/10us/20us			
# (1m + 3 x measuring distance x 10-5 + cursor resolution), (not including IOR error) Linearity ±0.05dB/dB Loss Threshold 0.001dB Sample Points ≥128k Sample Resolution ≤ 5 cm Display span 0dB ~ 40dB Display resolution ≤ 1 cm Refractive index 1.00000 ~ 2.00000 , in steps of 0.0001 (IOR Setting) Cursor resolution in approx Display resolution is ± 0,01dB Sampling resolution is approx Threshold -11 to -99 dB in 1 dB step Data storage Storage : 8GB (≥20000curves) File Format : SOR Laser Safety Level Class II Connector SC/UPC or SC/APC Distance measurement method LS Wavelength Consistent with OTDR Power [©] ≥-5dBm Mode CW/270/330/1kHz/2kHz Stability CW, ±0.5dB/15min Optical output port OTDR port OPM Wavelength 800nm ~ 1700nm Test Range -50dBm ~ + 26dBm or -70dBm ~ + 10dBm L5% Frequency Identification Calibration Wavelength PC/CC/CT without leases steep.	Distance range	0.1/0.25/0.5/1.25/2.5/5/10/20/40/80/125/260km			
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Linearity	Ranging Accuracy	± (1m + 3 x measuring distance x 10-5 + cursor			
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Test Range		800nm ~ 1700nm			
Uncertainty ±5% Frequency Identification Calibration Wavelength EC/SC/ST universal page 457					
Frequency Identification Calibration Wavelength CW/270/330/1kHz/2kHz 850/980/1300/1310/1490/1550/1625/1650nm					
Identification	-				
Wavelength					
FC/SC/ST universal connector		850/980/1300/1310/1490/1550/1625/1650nm			
Connector	Connector	FC/SC/ST universal connector			

Notes 1: Except for special wavelengths such as 850/1300nm 0

VFL			
Wavelength	650nm±20nm		
Output Power	≥10mW		
Mode	CW/1Hz/2Hz		
Laser SafetyLevel	Class III		
Distance	≥10km		
Connector	FC/SC/ST universal connector		
Measure R	45 Network Cables		
Distance	300m		
Distance unit	m/km/ft		
Test cable sequence	Yes		
Test cable tracking	Yes		
LED flashli	ght		
Others			
Display	4.3" LCD color touch screen (800*480pixel)		
Data Interface	USB Type-C		
File format	.SOR, Bellcore standard file format		
Software updates	Via PC or USB		
Power supply	AC voltage converter 100-240VAC, 50/60 Hz		
	to 5VDC - 2A.		
	Lithium rechargeable battery: 3.7V, 5000mAh		
Operating Temperature	-10°C ~ + 50°C		
Storage Temperature	-40 °C ~ + 70°C		
Relative Humidity	0~95%Non Condensing		
Size	173×109×45mm		
Weight	≤0.5kg		
Safety standards	EN61010-1		
Laser safety	IEC/EN 60825-1 : 2007 GB7247.1-2012		
EMC	Radiation standard:EN61326-1 Class A		
	Immunity:EN61326-1 Table2		
Language	Customizable in Chinese, English, Vietnamese and other languages		

Configuration List

No.	Name	Quantity	Remarks
1	VT-42MP LAS	1	Battery included
2	Connector SC/UPC or SC/APC(*)	1	
3	Connector FC	1	
4	Power Adaptor AC/DC, USB cable	1	
5	USB (Analysis software/User`s Manual)	1	
6	Accessories: alcohol swab, carrying bag	1	
7	User`s Manual	1	
8	SC/UPC or SC/APC coupling	1	
9	SC/APC-SC/UPC optical patch cord	1	
10	SC/UPC-LC/UPC optical patch cord	1	
11	Wire tracker receiver	1	
12	Connector cleaning kit	1	

^{(*):} OTDR connector standard can choose SC/UPC, SC/APC at the time of ordering the meter.