VT- 42MP AS Optical Time Domain Reflectometer

Optical Time Domain Reflectometer

VT- 42MP AS 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 assistantfor optical cable construction, installation and maintenance, project acceptance and on-site repair.

High-performance cpu, fast speed, smooth operation

Support dual-wavelength test Measurable macro bending

Small blind area,Short fiber test results are good

Support transmitting optical fiber,End fiber setup

OT curve list is displayed in full screen

Multiple sampling points high accuracy

OTDR

Transmitting fiber, End fiber

Dual wavelength test

Short fiber test

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...).

- Expert measurements for setting parameters such as: first compensation coil length, end compensation coil length, cable length, pulse width, average measurement time.

- The meter has a built-in compensation coil to detect the first event of the cable line, helping the tester not have to carry a compensation coil.

- 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 supports connection to smartphones and tablets via bluetooth to help users easily control, operate remotely, and export data when measuring in the field.

- 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 05 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/APC or SC/UPC standards, supporting conversion.

- Built-in high-capacity Lithium battery up to 5400 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

OTDR

Model	VT-42MP AS
Type	SM
Wavelength	1310nm/1550nm±20nm
Dynamic Range	30/28dB
Event Blind Zone	1.5m
ATT Blind Zone	8m
Pulse Width	3ns/5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/500ns/800ns/ 1us/2us/3us/5us/8us/10us/20us
Distance range	0.1/0.3/0.5/1.25/2.5/5/10/20/40/80/125/260km
Distance unit	Km, m, mi, kft (m displayed for short distances)
Ranging Accuracy	± (0.75m + 3 x measuring distance x 10-5 + cursor resolution), (not including IOR error)
Linearity	±0.03dB/dB
Loss Threshold	0.001dB
Sample Points	≥160k
Sample Resolution	≤ 5cm
Display span	0dB ~ 40dB
Display resolution	≤ 1cm
Refractive index	1.0 ~ 2.0 , in steps of 0.00001 (IOR Setting)
Cursor resolution in approx	± 0,01dB
Display resolution is approx	± 0,01dB
Sampling resolution in approx	± 0,01dB
Threshold	-11 to -99 dB in 1 dB step
Data storage	Storage：8GB（≥20000curves）File Format：SOR
Laser Safety Level	Class II
Connector	SC/APC or SC/UPC
Check connector	Yes
Distance measurement method	Automatically or via cursor

LS

Wavelength	Consistent with OTDR
Power①	≥-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
Uncertainty	±5%
Frequency Identification	CW/270/330/1kHz/2kHz
Calibration Wavelength	850/980/1300/1310/1490/1550/1625/1650nm
Connector	FC/SC/ST universal connector

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

VFL

Wavelength	650nm±20nm
Output Power	≥10mW
Mode	CW/1Hz/2Hz
Laser SafetyLevel	Class 3R
Distance	≥10km
Connector	FC/SC/ST universal connector

Measure Rj45 Network Cables

Distance	300m
Distance unit	m/km/ft
Test cable sequence	Yes
Test cable tracking	Yes

LED flashlight

Others

Display	4.3" LCD color touch screen (800*480pixel)
Data Interface	USB Type-C
Wireless Connectivity	Bluetooth
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, 5400mAh
Operating Temperature	-10℃ ~ + 50℃
Storage Temperature	-40 ℃ ~ + 70℃
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 AS	1	Battery included
2	Connector SC/APC or SC/UPC(*)	1	
3	Connector FC	1	
4	Power Adaptor AC/DC, USB cable	1	
5	USB (Analysis software/User`s Manual)	1	
6	Accessories: connector cleaning kit (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/APC-LC/UPC optical patch cord	1	
11	Wire tracker receiver	1	

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