

MULTI-FUNCTION OPTICAL TESTER

VT-42FR Min V2 (Mini OTDR)



Product overview

VT-42FR Min V2 mini optical time domain reflectometer is compact and easy to carry; it adopts a 3.5-inch high-definition touch screen, supports multi-touch and smooth operation. Internal integration of OTDR, event map, optical power, red light, flashlight and other functions in one, to meet various test needs in different occasions. Among them, the OTDR function adopts 1550nm wavelength and built-in high-efficiency wavelength isolator. It can perform optical test on 1490nm and 1577nm links. It supports up to about +10dBm with optical test capability, and the maximum measurement range is 80km.

The VT-42FR Min V2 is used to measure the length, loss, connection quality and other parameters of the optical fiber. It can easily test the breakpoint, bend, and loss point of the optical fiber link. It is suitable for line maintenance and emergency repair testing by installation and maintenance personnel.

Features

- Compact and attractive design, easy to carry
- Event list with intuitive display of analysis events
- Integrated VFL/OPM/LS with rich functionalities
- Battery life over 8 hours, ensuring safe operation
- Operating wavelength of 1550 nm, supports live testing
- Short event dead zone, measurement range up to 80 km
- 3.5" color TFT LCD multi-touch screen for user-friendly interaction
- High-performance processor for smooth control
- Type-C USB charging (similar to common smartphones), extremely convenient for users

Specifications

OTDR	
Model	VT-42FR Min V2
Fiber Type	SM
Wavelength	1550nm $\pm$ 20nm
Dynamic Range	25dB
Event Blind Zone	2.5m
ATT Blind Zone	10m
Test Range	100m/300m/500m/1.25km/2.5km/5km/10km/20km/ 40km/80km
Pulse Width	5ns/10ns/20ns/30ns/50ns/80ns/100ns/200ns/300ns/500ns/800ns/1 μ s/2 μ s/3 μ s/5 μ s/ 8 μ s/10 μ s
Ranging accuracy	$\pm$ (1m+sampling interval+0.005% $\times$ distance)
Loss accuracy	$\pm$ 0.05dB / dB
Sampling Points	20k
Reflection accuracy	$\pm$ 3dB
Sampling resolution	$\leq$ 5cm
Loss resolution	0.01dB
Distance resolution	0.01m
Loss threshold	0.20dB
File format	SOR Standard file format
Loss Analysis	4 - point method / 5 - point method
Refractive index	1.00000 ~ 2.00000 , 0.0001 step (IOR Setting)
Laser Safety Level	Class II
Connector	SC / APC
OPM	
Wavelength range	800nm ~ 1700nm
Connector	Universal FC / SC / ST
Test scope	-50dBm ~ + 26dBm / -70dBm ~ + 10dBm

Identification frequency	CW / 270Hz / 330Hz / 1kHz / 2kHz
Uncertainty	± 5 %
Calibration wavelength	850nm / 980nm / 1270nm /1300nm / 1310nm / 1490nm / 1550nm /1577nm / 1625nm / 1650nm (Support 10G-PON wavelength measurement)
LS	
Wavelength	Consistent with OTDR output wavelength
Laser Type	FP-LD
Output power	≥ -5dBm
Stability	CW , £ 0.5dB / 15min (Test after 15 minutes of boot - up preheating)
Connector	Consistent with OTDR
Mode	CW / 270Hz / 330Hz / 1kHz / 2kHz
VFL	
Wavelength	650nm +20nm
Output Power	≥ 10mW
Mode	CW / 1Hz / 2Hz
Connector	Universal FC / SC / ST
Laser Safety Level	Class III
Others	
Display	Full Touch 3.5 inches, 320x480, Color LCD screen
Data Interface	Type-C USB
Data Storage	Internal : ≥ 2000 curves
Power Supply	AC / DC Adapter : Input : 100V ~ 240V , 50 / 60Hz Output : 5V , 2A , Li - Battery : 3.7V , 2200mAh
Battery working hours	Continuous testing > 8 hours ; Standby > 12 hours
Operating Temperature	-10°C ~ + 50°C
Storage Temperature	-40°C ~ + 70°C
Relative Humidity	0 ~ 95 % Non Condensing
Weight	≤ 200g (Battery included)
Size	126mm x 80mm x 37mm

Packing

NO.	Name	Quantity	Remarks
1	VT-42FR Min V2 Mini OTDR	1	
2	AC/DC power adapter	1	
3	Data line	1	
4	SC/UPC Coupler	1	
5	SC/APC-SC/UPC optical patch cord	1	
6	U disk(containing analysis software/instruction manual)	1	
7	User's manual	1	
8	Instrument bag	1	