FTTx-OTDR

Model: VT-42FO

Product overview

VT-42FO OTDR focuses on FTTx network installation and troubleshoot-ing, supporting access and passive optical network testing. Available in single, dual, and three-wavelength models, with the single-wavelength model support-ing online testing. Meets diverse user needs. Its compact design and multi-wavelength configuration make it highly adaptable for FTTx network de-ployment and maintenance.

Features

- Smart link diagram
- 6000mAh large capacity battery
- ⩽1.5m event blind zone, ⩽5m attenuation blind zone
- Support XGPON/XGSPON optical power measurement with wavelength 1270nm, 1577nm.
- Measures continuous events on 8x3m optical fiber jumpers in fully automatic mode (industry benchmark).

Specifications

	OTDR
Model	VT-42FO
Wavelength (nm)	1310/1550±20
Dynamic range (dB)	27/25
Event blind spot(m)★①	≤1.5
Attenuation blind zone(m)★②	≤5
Number of fiber interfaces	1 SC/APC
Applicable optical fiber	SM
Maximum measuring distance(Km)	150
Range(Km)	0.5, 1, 2, 5, 10, 20, 35, 50, 75, 100, 150
Distance accuracy(m)	± (1m + measurement distance × 2 × 10 − 5 + collection point resolution)
Pulse width(ns)	5,10, 20, 50,100, 200, 500,1000, 2000,10000, 20000
Number of sampling points	≥15000
Sampling resolution(m)	0.04m
Loss accuracy	±0.03 dB/dB
Reflection accuracy	±2dB
	OPM
Measurement wavelength range	800~1700nm
Correction wavelength(nm)	850,1270,1300,1310,1490,1550,1577,1625,1650 Support XGPON/XGSPON (1270,1577)
Measurement power range	-70~6dBm
Measurement accuracy	<(±0.2dB or ±5%)
Display resolution	0.01dB
Power meter interface	FC/UPC + 2.5 mm Universal Connector
	LS
Wavelength (nm)	1310/1550
Output power	≥-10dBm
Modulation frequency	CW, 270Hz, 1kHz, 2kHz
Laser safety rating	Class 1M or Class 1
Built-in optical fiber interface	OTDR optical port
	VFL
Wavelength (nm)	650

Output Power	10mW
Modulation mode	CW, CHOP (2 Hz)
Laser safety rating	Class 3R
Optical fiber interface	2.5 mm universal connector for FC, SC, ST
	RJ45
Applicable network cable	CAT5, CAT6
Alignment length	300m
Maximum audio transmission distance	300m
	General parameters
Link diagram	√
Pass/Fail display	x
Distance unit	km
PC side analysis software	√
Language	English, Spanish, French, Portuguese, Russian
Optical fiber interface	SC/APC
Display screen	4.3-inch color LCD Touch screen (resolution: 800x480)
Interface	Type-c charging interface x1, USB 2.0 x1, RJ45 x1
Operating temperature	-10-50 ℃ (0-40 ℃ connected to power supply, 0 to 35 ℃ battery charge)
Storage temperature	-20 to 60° C
Elevation	4000 m
Humidity	0 to 90% RH (at: 20%-90% 739874 AC adapter, no frost)100-240V AC, 50/60 Hz (AC adapter)
Power supply mode	100-240V AC, 50/60 Hz (AC adapter)
Battery	3.7V, 6000mAh, >22Wh
Illumination lamp	Light intensity ⩾ 15000 mcd
Working hours*3	5 hours
Data Storage	Memory: ⩾ 1000 test curve; External storage: USB
Dimensions	179 mm (W)x112 mm (H)x 48 mm (D)
Weight	0.6 kg (mainframe only with battery)

Notes:

★① Minimum pulse width, return loss: ⩾ 55 dB (⩾ 40 dB at 850/1300 nm), group refractive index: 1.5, 1.5 dB lower than the unsaturated peak level.

★② Minimum pulse width, group refractive index: 1.5, backscattering level within ± 0. 5 dB of the conventional value. For SMF, 1310 nm wavelength, return loss: ⩾ 55 dB. For MMF, 850 nm wavelength, return loss: ⩾ 40 dB.

★③ Based on a brand new battery.

All data above are based on measurements at 23° C ± 2° C (73.4° F ± 3.6° F).

Packing

NO.	Name	Quantity	Remarks
1	OTDR (default SC interface)	1	
2	Power cord	1	
3	FC optical port converter	1	
4	Screwdriver	1	
5	Quick guide,..	1	
6	RJ45 module	1	
7	Sterile cotton swabs	1	
8	Shoulder strap	1	
9	Carrying bag	1	