

# WRX3000 Singlemode OTDR

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**Singlemode 1310, 1550, 1610**



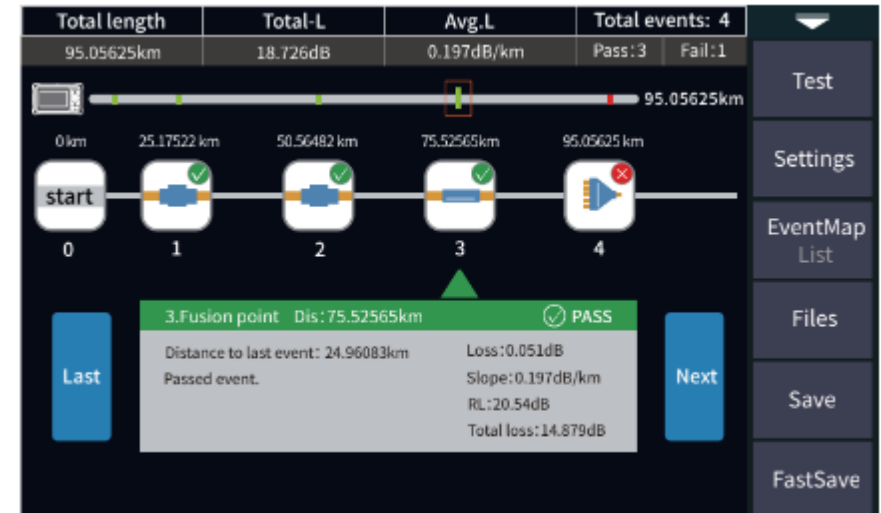
The WRX3000 series optical time domain reflectometer (OTDR) adopts a 4.3 inch capacitive touch screen and integrates twelve functions including auto OTDR, expert OTDR, event map, OPM, RJ45 cable tracker, and “computer level” file management to meet various test requirements. The OTDR has a maximum dynamic range of 26dB, 8G memory, and can store more than 200,000 curves. It is also equipped with a 4000mAh high density polymer lithium battery with intelligent power saving management providing up to twelve hours testing time.

The WRX3000 series is used to measure the length, loss, and connection quality of optical fiber used in engineering construction, line maintenance & testing, emergency repair, and the development and production of optical fiber cables.

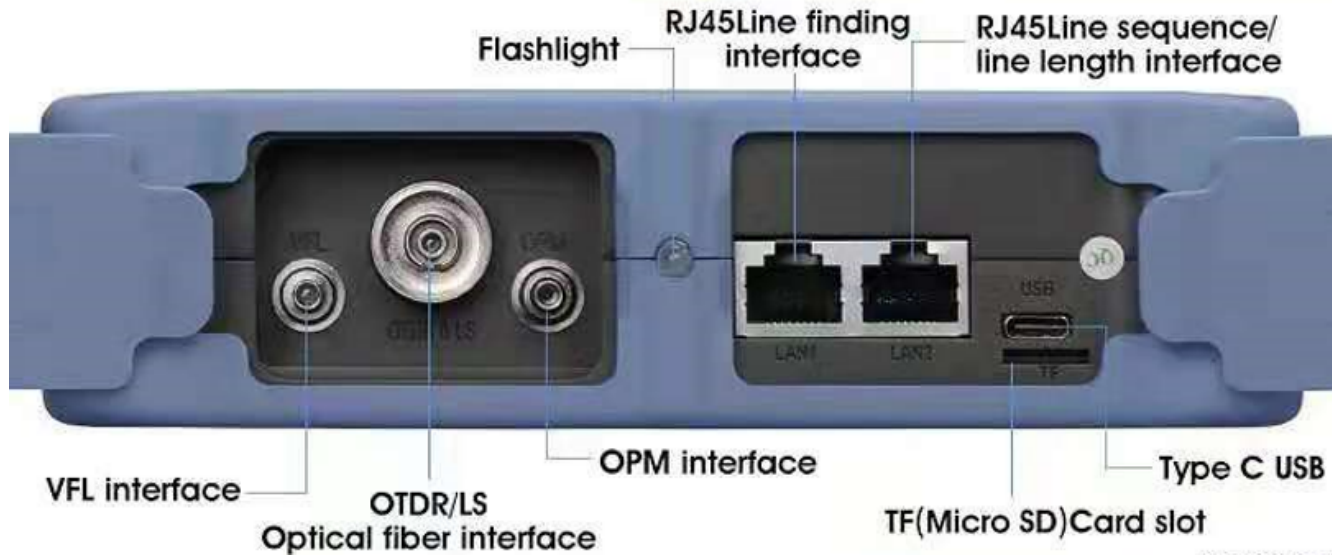
## Features

- 4.3" capacitive touch screen zoom in and out curve
- 2.5m Event Dead Zone
- Maximum dynamic range 26 dB
- Supports Single Mode 1310nm,1550nm,1610nm
- Twelve functions including Auto OTDR, expert OTDR, event map, OPM, LS, VFL, RJ45 cable tracker, RJ45 cable length, end face detection, optical loss test, flashlight
- Auto OTDR one key test, no complex settings
- VFL and LS can be run in the background, tasks can be run simultaneously
- RJ45 cable tracker of digital radar
- RJ45 cable sequence/cable length test up to 300m
- One click screen capture, stores 200,000 curves
- HD imaging end face detection
- "Computer level" file management, 8G memory
- 4000mAh lithium battery, twelve hours of testing
- LS supports CW/modulation mode output with adjustable output power
- OPM supports CW/270/330/1k/2kHz frequency identification PON network online test

## Automatic OTDR test function



## Ports



## Specifications

WRX3000-X(X)	S1	S2	D	F1(live test)	F2(live test)	T (live test)
Type	G.652 SM					
Wavelength (nm)	1310± 20nm	1550± 20nm	1310/1550± 20nm	1310± 20nm	1550± 20nm	1610± 20nm
Maximum Dynamic Range (dB)	26dB	24dB	26dB/24dB	26dB	24dB	22dB
Event Blind Zone	2.5m					
Attenuation Blind Zone	8m					

Test Range	500m/1km/2km/4km/8km/16km/32km/64km/100km
Pulse Width	3ns/5ns/10ns/20ns/30ns/50ns/80ns/160ns/320ns/500ns/800ns/1 $\mu$ s/2 $\mu$ s/3 $\mu$ s/5 $\mu$ s/8 $\mu$ s/10 $\mu$ s/20 $\mu$ s
Range Accuracy	$\pm (1.0m + \text{Sample Interval} + 0.005\% \times \text{Test Distance})$
Loss Accuracy	$\leq 0.05 \text{ db/db}$
Sample Points	16k~128k
Sample Resolution	0.05m~8m
Reflection Accuracy	$\pm 3\text{dB}$
Loss Resolution	0.001dB
Loss Threshold	0.20dB
File Format	SOR Standard File Format
Loss Analysis	4-point method / 5-point method
Laser Safety Level	Class II
Refresh Rate	3 Hz (Typical)
Data Storage	Internal Storage - 2GB, 200,000 curves; External Storage - 8GB
Connector	FC/UPC (interchangeable with SC and ST)
Data Interface	USBType-C port
<b>OPTICAL POWER METER</b>	
Wavelength Range	800 nm~1700 nm
Connector	Universal FC/SC/ST
Test Scope	-50dBm~+26dBm/-70dBm~+6dBm
Uncertainty	$\pm 5\%$
Calibration Wavelength	850nm/980nm/1300nm/1310nm/1490nm/1550nm/1625nm/1650nm
<b>LASER SOURCE</b>	
Laser Type	FP-LD
Wavelength	Consistent with OTDR Output wavelength
Output Power	$\geq -5 \text{ dBm (SM Fiber)}$
Mode	CW/270Hz/1kHz/2kHz
Stability	CW, $\pm 0.5 \text{ dB/15 Min (Test after 15 minutes of preheating)}$

Connector	FC/UPC (interchangeable with SC and ST)
<b>VISUAL FAULT INDICATOR (VFL)</b>	
Wavelength	650nm± 20nm
Output Power	≥ 10 dBm
Mode	CW/1Hz/2Hz
Connector	FC/UPC (interchangeable with SC and ST)
<b>RJ45 CABLE TRACKER</b>	
Mode	Digital tracking
Distance	≥ 300km
Line Pair Tracking	Support
Connector	FC/UPC (interchangeable with SC and ST)
<b>GENERAL PARAMETERS</b>	
Display	4.3 inches color LCD plus touch screen resolution - 800x480 IPS TFT
Power Supply	Type-C adapter: Input: 100V~240V, 50/60 Hz, Output 5V/3A, 9V/2A12V/1.5A Lithium battery - 3.7V, 4000mAh; 12 hours live testing
Working Temperature	-10°C ~ +50°C
Storage Temperature	-40°C ~ +70°C
Relative Humidity	0~95%, Non Condensing
Weight	.5kg
Size	173mmx109mmx45mm
<b>Functions of Host: Auto OTDR/ Expert OTDR/Event Map/OPM/LS/VFL/RJ45 cable tracker, line finder, cable sequence, cable length, end face detection/flashlight/optical loss test</b>	

## Applications

- Measure the loss of splicing points, optical connectors and adapters
- Measure the loss of single fiber or cable
- Measure the length of cable
- Set different refractive indexes for various fibers
- Locate the position of the broken point, optical connector and adapter
- Measure the discrete reflection ratio between SR points
- Measure return loss for the whole fiber circuit



## Ordering Information

Model	Wavelength	Dynamic Range	Included in Package
WRX3000-S1	1310nm	26dB	Host OTDR (battery included) AC/DC Power Adapter 8GTF card (built-in OTDR, Analysis software, User's manual) SC Adapter Cotton piece Calibration certificate; Warranty card Instrument backpack
WRX3000-S2	1550nm	24dB	
WRX3000-D	1310nm/1550nm	25dB/24dB	
WRX3000-F1	1310nm	26dB	
WRX3000-F2	1550nm	24dB	
WRX3000-T	1610nm	22dB	