

## NK4000 series OTDR

### Summary:

NK4000 series OTDR adopts 4.3-inch capacitive touch screen. It integrates 12 functions, such as auto OTDR, expert OTDR, event map, OPM, RJ45 cable tracker, and "computer level" file management to meet various test requirements in different occasions. OTDR has a maximum dynamic range of 26dB, 8G memory, and can store more than 200,000 curves; it is equipped with 4000mAh high-density polymer lithium battery, intelligent power saving management, measuring time of more than 8 hours, and supporting power supply and charging of the power bank.

NK4000 series are used to measure the length, loss, connection quality and other parameters of optical fiber. It is widely used in FTTX, secondary backbone network engineering construction, maintenance and emergency repair test, and production measurement of optical fiber and cable.

### Functions:

Auto OTDR, expert OTDR, Event Map, OPM, LS, VFL, RJ45 Cable Tracking(Including line finder), RJ45 Cable Sequence, RJ45 Cable Length, End Face Detection(Optional), Flashlight, Optical Loss Test

### Technical specifications:

OTDR						
Model	NK4000D					
Wavelength	1310/1550±20nm					
Fiber Type	G.652					
Dynamic Range	26dB	24dB	26/24dB	26dB	24dB	22dB
Event Blind Zone	2.5m					
ATT Blind Zone	8m					
Test Range	500m/1km/2km/4km/8km/16km/32km/64km/100km					
Pulse Width	3ns~20us					
Ranging accuracy	± (1m+ Sampling interval +0.005%×Test distance)					
Linearity	±0.05dB/dB					
Sampling Points	16k~128k					
Sampling Resolution	0.05m~8m					

Loss Resolution	0.001dB
Loss Threshold	0.20dB
Range Resolution	0.001m
Refractive Index	1.00000~2.00000
Reflection accuracy	±3dB
File format	SOR Standard file format
Loss Analysis	4-point method /5-point method
Laser Safety Level	Class 2 级
Connector	FC/UPC (Interchangeable SC、ST)
Refresh Rate	3Hz (Typ.)
Multitasking	Support
<b>OPM</b>	
Wave Range	800nm~1700nm
Calibration wavelength	850/980/1300/1310/1490/1550/1625/1650nm
Test Range	-70dBm~+10dBm (optional)/-50dBm~+26dBm (Standard)
Resolution	0.01dB
Uncertainty	±5%
Frequency Identification	CW/270/330/1k/2kHz
Connector	Universal Joint FC/SC/ST
Wave Recognition	Support (Use inner LS)
<b>LS</b>	
Wavelength	Consistent with OTDR output wavelength
Laser Type	FP-LD
Output Power	≥-5dBm (Adjustable)
Stability	CW, ±0.5dB/15min (Test after 15 minutes of preheating)
Connector	FC/UPC (Interchangeable SC、ST)
Mode	CW/270/330/1k/2kHz
Wave Recognition	Support
<b>VFL</b>	
Wavelength	650nm ± 20nm
Output Power	≥10mW
Mode	CW/1Hz/2Hz
Connector	FC/UPC (Interchangeable SC、ST)
<b>Optical Loss Test</b>	

Wavelength	Consistent with LS
IL Test	Support
<b>RJ45 Cable length/Cable sequence</b>	
Test Range	≤300m
<b>RJ45 Cable Tracking</b>	
Mode	Digital tracking
Distance	≤300m
Online/Line Pair Tracking	Support
<b>Others</b>	
Display	4.3 inches 800×480 IPS TFT - LCD Multi touch capacitive touch screen
Power Supply	Polymer Li-Battery: 3.7V, 4000mAh Adapter: 5VDC, 2A
Battery working	Standby>20h; Continuous test>12h
Data Storage	Internal storage: 8GB, ≥20 thousand curves
Data Interface	USB Type-C
Working Temperature	-10℃~50℃
Storage Temperature	-40℃~70℃
Relative Humidity	0~95% Non Condensing
Weight	≤500g (Battery included)
Size	173mm×109mm×45mm

**Note:**

- 1、NK4000F1 can test fiber with 1490/1550nm signal (power ≤-5dBm)  
NK4000F2 can test fiber with 1310/1490nm signal (power ≤-5dBm)  
NK4000T can test fiber with 1310/1490/1550nm signal (power ≤0dBm)
- 2、Dynamic Range test temperature is 25℃+2℃, maximum pulse width, the average time is more than 3 minutes.
- 3、The test conditions of event blind zone are minimum range, minimum pulse width, reflection loss of optical fiber end (> 45dB), typical value.

**Standard configuration:**

NO.	Name	Quantity	Remarks
1	Host	1	Battery included
2	Adapter	1	
3	Data Line	1	
4	8G TF card (Analysis software/User' s Manual)	1	built-in OTDR
5	User' s Manual	1	

6	SC adapter	1	
7	Qualification Certificate/ Service Guarantee Card	1	
8	Calibration Certificate	1	
9	Clean Cotton Slices	10	
10	Instrument Backpack	1	

**Note:** The OTDR connector is FC/UPC as standard and FC/APC is optional.