K350

FIBER MASTER OTDR

Multi-function

1m Event dead zone

140km Largest range

Self calibration
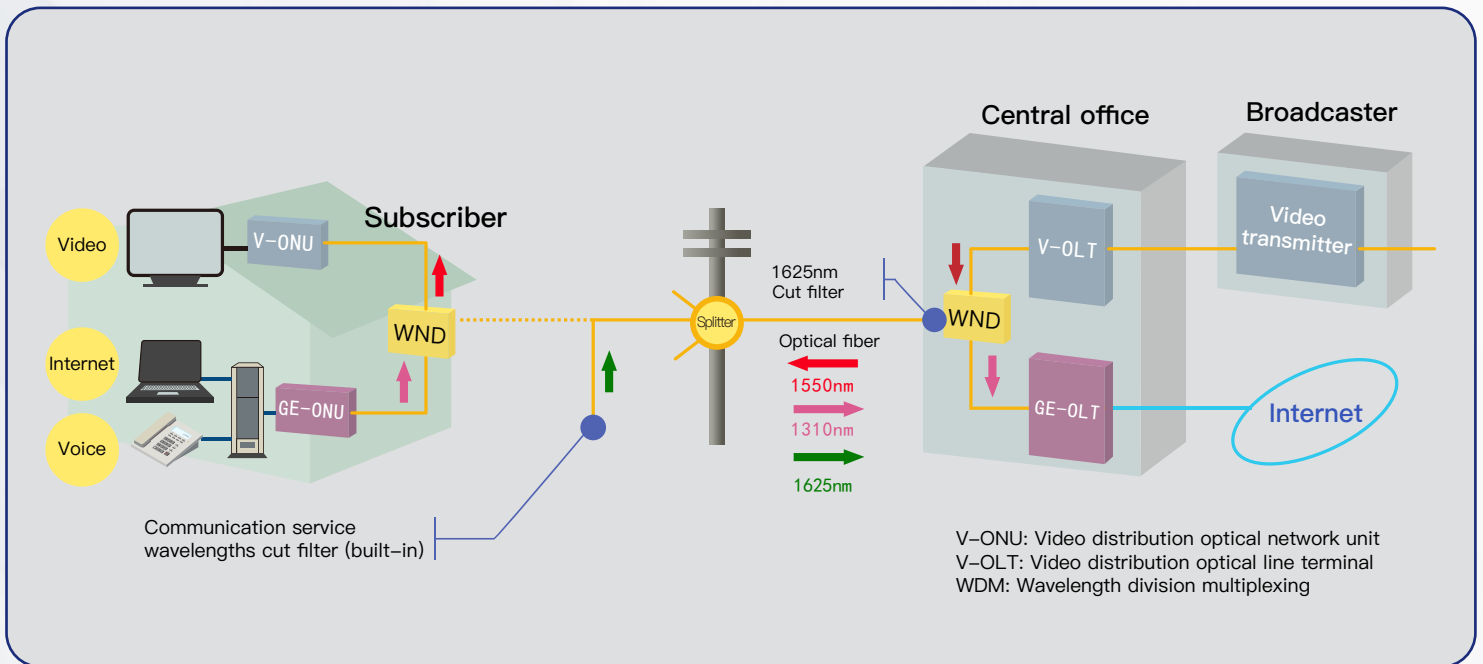
Dual wavelengths testing

3-year Warranty

◈ Application scenarios

Central office   Broadcaster

Subscriber

Video

Internet

Voice

V–ONU

WND

GE-ONU

Splitter

1625nm
Cut filter

Optical fiber

1550nm
1310nm
1625nm

V–OLT

WND

GE-OLT

Video
transmitter

Internet

Communication service
wavelengths cut filter (built–in)

V–ONU: Video distribution optical network unit
V–OLT: Video distribution optical line terminal
WDM: Wavelength division multiplexing

KL350 OTDR is widely used in optical network terminals (ONT), FTTH distribution (F2) fiber characterized distribution hubs (FDH), fault diagnosis and fault finding.

⬡ Product Features

- ◐ Long–haul network testing
- ◐ Access network testing
- ◐ FTTx/PON testing through splitters
- ◐ Compact, rugged, light weight 0.7kg
- ◐ All new UI design with innovation

- ◐ 32dB Dynamic range
- ◐ 1m Event dead zone
- ◐ Bult–in OPM、SLS、VFL、RJ45、FIP modules
- ◐ Link Map & Pass/Fail judgment functions
- ◐ Dual wavelengths testing

Stainless steel
fiber connector

All–inclusive silicone sheath
Anti–drop

The network sequencing
Hidden module
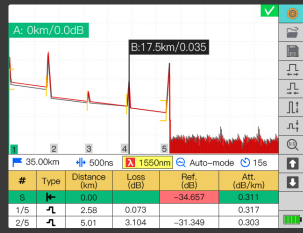
Supports USB
data transmission
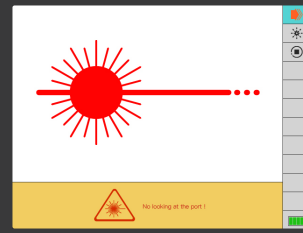
Multi-function

01 OTDR Testing

OTDR Dual wavelength simultaneous testing, intelligent trace analysis, multi–interface result display, easy operation
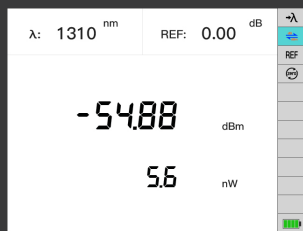
02 Visual Fault Locator

VFL Stable lighting, strong light source, two modes–– PW & CW
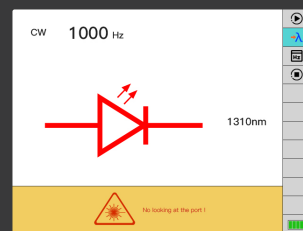
03 Optical Power Meter

For measuring absolute optical power or relative loss of optical power through a length of fiber
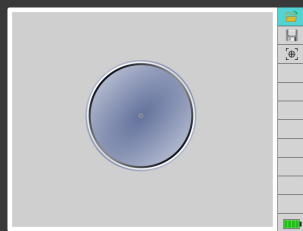
04 Stabilized Light Source

Stable light source, used in combination with a power meter

05 Fiber Inspection Probe

Optional inspection probe to inspect fiber interface.

06 RJ45 Networks Test

Network cable sequencing

Dual Working Mode

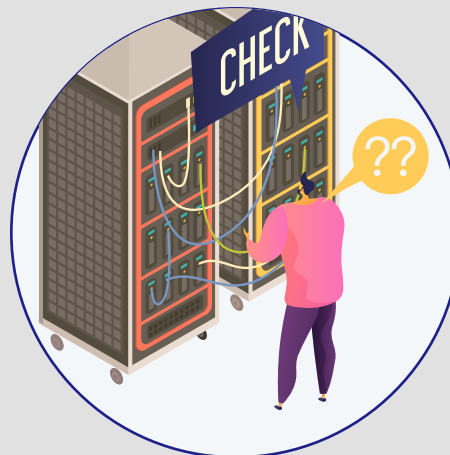## Four test modes meet your measurement needs

Real–time test:
Monitors link measurement information, but does not analyze event information.

Average test:
Fixed time measurement, the results and event information will be analyzed after the measurement.

Intelligent automatic

It is convenient for beginners to quickly complete the test

Expert Manual Mode

Select the expert manual mode to test

Interface upgrade
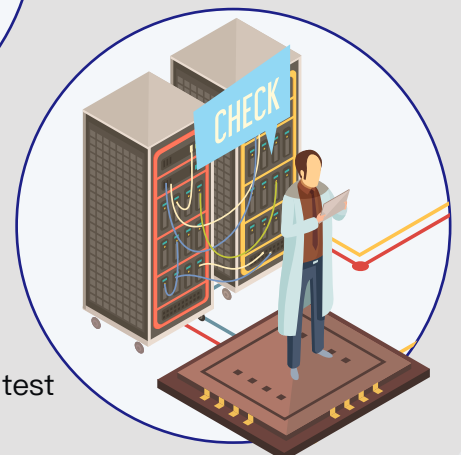
Brand−new UI Design

Intelligent trace analysis

Intelligent trace analysis Dynamic display of test results

The test results are shown in a trace with distance on horizontal axis, lost power on vertical axis. When too many events, the horizontal and vertical axes can be enlarged to analyze.

Events List

Optical cable breakpoint, loss, length, bending, connection, etc., in the trace, the loss or reflection obtained by the test is represented by events, and three event parameters can be viewed at the same time.

Support the dual wavelengths testing 1310nm/1550nm

Link Map

Total Atten. (dB)	Atten. (dB/km)	Fiber Length (km)
3.855	1.195	11.625

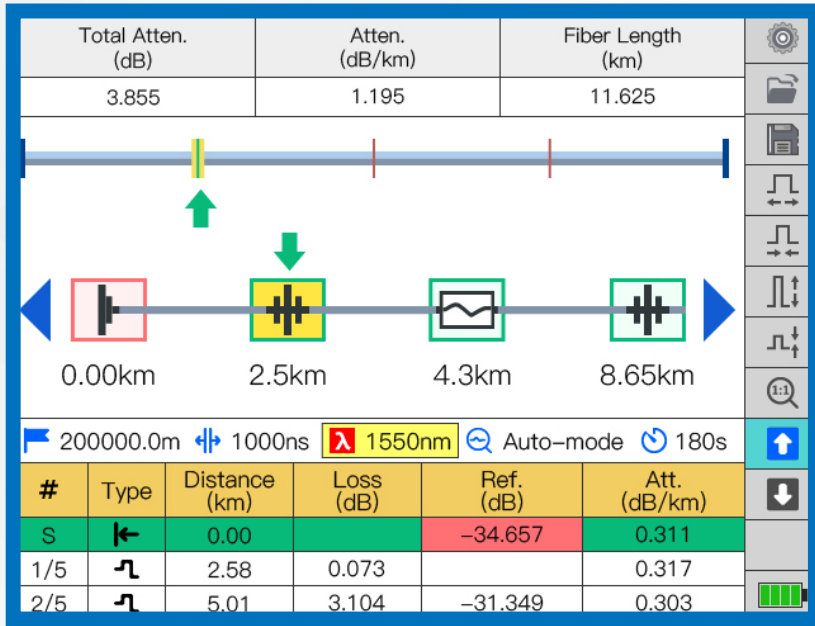0.00km   2.5km   4.3km   8.65km

🚩 200000.0m ⟨⟩ 1000ns λ 1550nm ⊖ Auto-mode ⏱ 180s

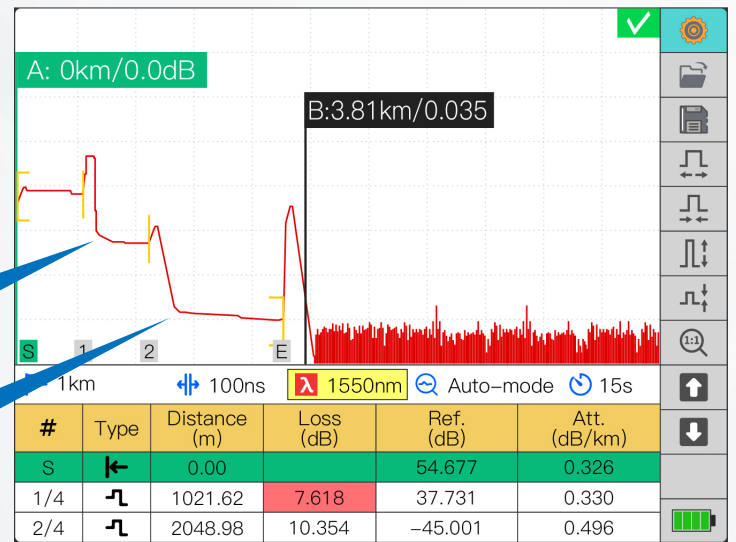| #	Type	Distance (km)	Loss (dB)	Ref. (dB)	Att. (dB/km)
S	⊢	0.00		−34.657	0.311
1/5	⊐	2.58	0.073		0.317
2/5	⊐	5.01	3.104	−31.349	0.303

Link Map Function Icon Displays Events

A simple and intuitive graphical interface displays the length, event type, and breakpoint location of optical fiber links. One-click test operation enables instant isolation and evaluation of optical fiber failures.

Splitter Test

Test Three-level Splitter, up to 1:32

1: 4

1: 8

A: 0km/0.0dB

B:3.81km/0.035

⟨⟩ 100ns λ 1550nm ⊖ Auto-mode ⏱ 15s

#	Type	Distance (m)	Loss (dB)	Ref. (dB)	Att. (dB/km)
S	⊢	0.00		54.677	0.326
1/4	⊐	1021.62	7.618	37.731	0.330
2/4	⊐	2048.98	10.354	−45.001	0.496

1: 4   1: 4   1: 2

A: 0km/0.0dB

B:3.81km/0.035

🚩 15.00km ⟨⟩ 500ns λ 1550nm ⊖ Auto-mode ⏱ 15s

#	Type	Distance (m)	Loss (dB)	Ref. (dB)	Att. (dB/km)
S	⊢	0.00		−41.889	
1/3	⊐	1033.11	7.305	−51.524	0.325
2/3	⊐	3371.24	6.368	−58.467	0.297

1: 16

A: 0km/0.0dB

B:3.81km/0.035

🚩 15.00km ⟨⟩ 500ns λ 1550nm ⊖ Auto-mode ⏱ 15s

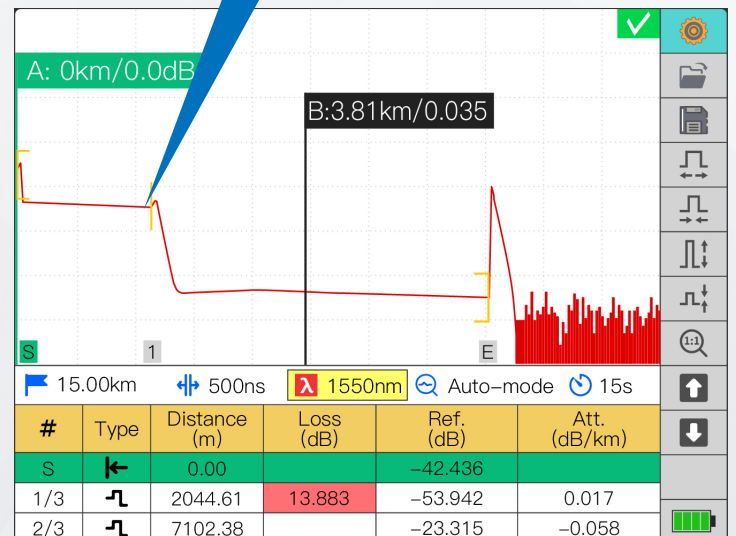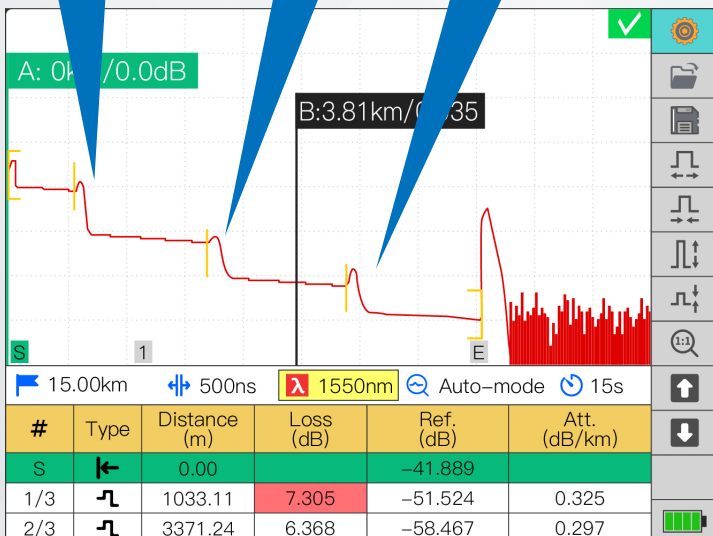| #	Type	Distance (m)	Loss (dB)	Ref. (dB)	Att. (dB/km)
S	⊢	0.00		−42.436	
1/3	⊐	2044.61	13.883	−53.942	0.017
2/3	⊐	7102.38		−23.315	−0.058

Self Calibration
Convenience to Maintenance

Circuit board
Optical circuit
Optical device

After the machine has been used for a long time, when its accuracy is not enough, it can perform self-calibration, reduce maintenance time and save costs

Self Calibration   2021.07.20

1 Circuit

In progress, do not turn off

2 Optical circuit

Confirm

3 Optical device

Cancel
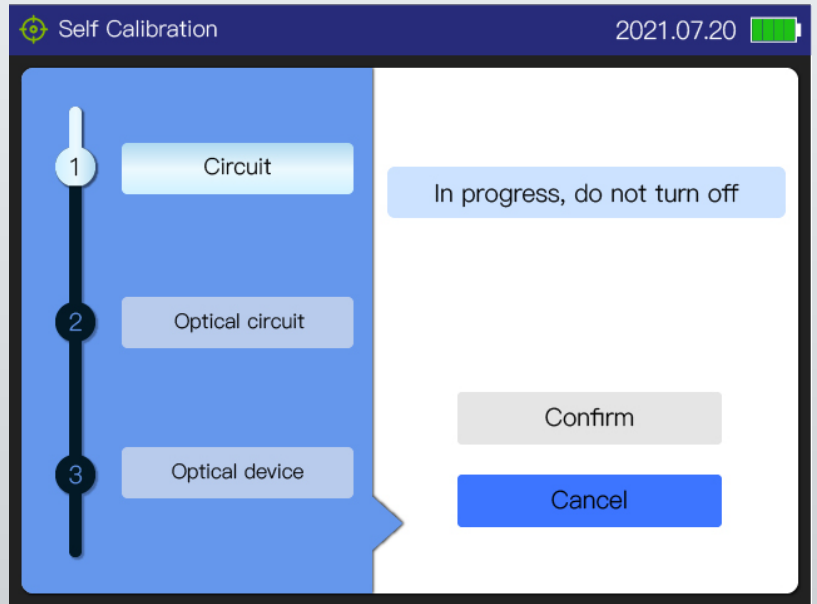
◈ OTDR Trace Manager

Read and analyze on PC

Mass Traces Operation

View the sor file in the OTDR trace manager, mass traces operation, add/delete events, bidirectional trace analysis, print preview, etc.

Number	File name list
1	Fiber001_1310.SOR
2	Fiber001_1550.SOR
3	Fiber002_1310.SOR
4	Fiber002_1550.SOR

Fiber Connector

SC

ST (Optional)

LC (Optional)

FC (Optional)

Standard Package

① Carry Bag
② OTDR main body
③ Inspection Certificate
④ Power adapter
⑤ Gallusus
⑥ Quick Reference Guide
⑦ Calibration Certificate
⑧ Brochure–JILONG/TAWAA

Specifications

OTDR Specifications

	K350–S	K350–P
Model	K350–S	K350–P
Wavelength (nm)	SM 1310/1550	PON 1310/1550/1625 (built–in filter)
Dynamic range (dB)	32/30	32/30/28
Number of optical port	1	2
Applicable fiber	SM (ITU–T G.652)	
Distance range (km)	0.5,1,2,5,10,20,35,50,75,100,150,200	
Pulse width (ns)	5,10,20,50,100,200,500,1000,2000,10000,20000	
Event dead zone*1 (m)	1	
Attenuation dead zone*2 (m)	3.5	
Number of sampling points	Max.80000	
Sampling resolution	Min.0.04m	
Distance measurement accuracy	$\pm(0.75 \text{ m} + \text{Measurement distance} \times 2 \times 10^{-5} + \text{Sampling resolution})$	
Loss measurement accuracy	±0.03 dB/dB	
Return loss measurement accuracy	±2 dB	

Optical Power Meter Module (Built–in)		√	×
OPM	Wavelength (nm)	800 ~ 1650nm	
	Power range	−70 ~ +6dBm	
	Measure accuracy	< （±0.2dB or ±5%)	
	Display resolution	0.01dB	
	Optical input port	SC/UPC + 2.5mm Universal ferrule	

Stabilized Light Source Module (Built–in)		√	√
SLS	Wavelength (nm)	1310/1550	
	Output power	≥−10dBm	
	Modulation mode	CW, 270 Hz, 1 kHz, 2 kHz	
	Laser class	Class 1M or Class 1	
	Optical input port	OTDR port	

Visual Fault Locator Module (Built–in)		√	√
VFL	Wavelength (nm)	650	
	Output power	10mW	
	Modulation mode	CW, CHOP (2 Hz)	
	Laser class	Class 3R	
	Optical input port	2.5 mm Universal ferrule type	

Fiber Inspection Probe (Built–in)		Optional	Optional
FIP	Magnification	250X	
	Resolution(um)	≥1.0	
	Electrical interface	USB2.0	
	Optical Connector	FC/UPC,SC/UPC,ST/UPC	
	Sensor	1/3 inch	

		√	√
RJ45	Wavelength (nm)	CAT5, CAT6	
	Distance of Cable Collationl	300m	
	Distance of emitting signal	300m	

General Specifications

Link Map	√
Pass/Fail judgment	√
Distance unit	m, km, mile, ft, kft
PC Analysis Software	√
Languages	English, Español, Chinese, Português, Français, Русский
Optical connector	SC/UPC (FC/UPC,ST/UPC,LC/UP is Optional)
Display	3.5–inch color TFT LCD (Resolution: 640 × 480)
Electrical interface	Charge port × 1, USB 2.0 × 3, RJ45 × 2
Operating temperature	–10 ~ 50℃ (0 ~ 40℃ when AC adapter is being used. 0 to 35℃ when battery is be charged)
Storage temperature	–20 to 60℃
Altitude	4000 m
Humidity	0 to 90% RH (20 to 90% with 739874 AC adapter, non–condensing)
Power requirements	100 – 240V AC, 50/60Hz (AC adapter)
Battery	3000mAh
LED Light illumination	≥15000mcd
Operating time*3	5 hours
Data storage	Internal storage: ≥1000 waveforms, External storage: USB memory
Dimensions	118 mm (W) × 218 mm (H) × 55 mm (D)
Weight	Approx. 0.73 kg (including internal battery and protectors, excluding OTDR unit and options)

Notes:

1. Minimum pulse width, return loss: ≥55 dB (≥40 dB for 850/1300 nm), group refractive index: 1.5, at 1.5 dB below the unsaturated peak level.
2. Minimum pulse width, group refractive index: 1.5, at a point where the backscatter level is within ±0.5dB of the normal level. For SMF, at 1310nm, return loss: ≥55dB.
3. New Battery
All specifications valid at 23℃ ± 2℃ (73.4℉ ± 3.6℉) unless otherwise specified.

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