

# Fiber Ranger—OT-8200

## *Optical Time Domain Reflectometer*

The Fiber Ranger OT-8200 is a high performance optical fiber troubleshooter for locating fiber connector, break and imperfections. It detects event locations in the optical fiber and displays the results on the LCD display. This ranger is light, and easy to use, hence ideal for fiber cable troubleshooting, repairing, and restoration.

The structure of fiber ranger is highly simplified to make it a low cost, high performance fiber optical test instrument. Although the fiber ranger neither displays the trace of the fiber nor gives any information about the fiber and event losses, it can identify fault types and locations, based on a set of pre-determined threshold values, in the entire length of the fiber under test.

## *Main Features*

- Identifying the fault type; reflective or attenuate
- OT-8210/8220 event dead zone as low as 5m
- Light, compact, portable, optical fiber tester
- Backlight LCD display
- Battery-low screen alert
- Auto-off for battery saving
- Built-in LED Flashlight
- OT-8230/8240 equipped with RS-232 port for data transmission

## *Applications*

- Fiber length measurement
- Fiber fault event(s) locating
- Fiber event(s) identification



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# *Specifications*

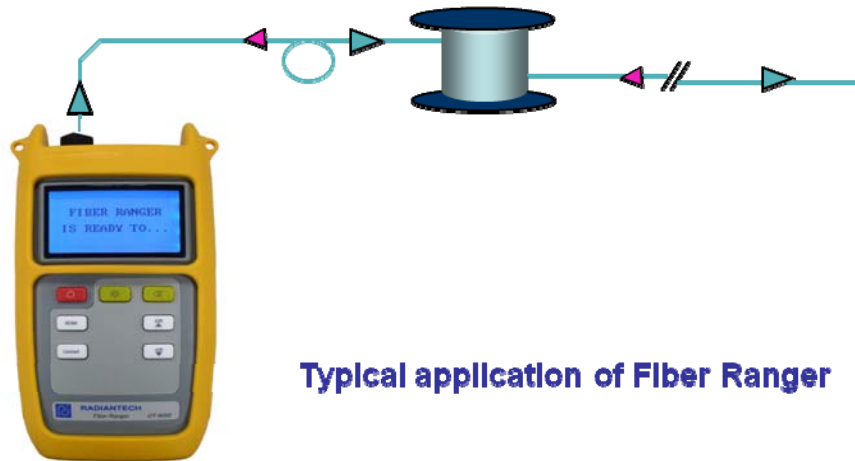
Item \ Model	OT-8210	OT-8220
Wavelength	1310 +/- 20 nm	1550 +/- 20 nm
Fiber Under Test	9/125 $\mu$ m Single Mode Fiber	
Sensor	InGaAs	
Pulse Width	20 ns / 200 ns	
Reflection Event <sup>1</sup> (Max)	10 km	
Non-Reflection Event <sup>1</sup> (Max)	10 km	
Reflection Event Dead Zone <sup>2</sup>	< 5 m	
Non-Reflection Event Dead Zone <sup>3</sup> (3dB)	< 40 m	
Power Supply	4 AA Size Alkaline 1.5 Volt Batteries	
Distance Accuracy (Reflective Event Detection)	$\pm 4 \text{ m} + 2 \times 10^{-3} \times \text{Distance}$	
Item \ Model	OT-8230	OT-8240
Wavelength	1310 +/- 20 nm	1550 +/- 20 nm
Fiber Under Test	9/125 $\mu$ m Single Mode Fiber	
Sensor	InGaAs	
Pulse Width	200 ns / 1 $\mu$ s / 10 $\mu$ s	
Reflection Event <sup>1</sup> (Max)	80 km	100 km
Non-Reflection Event <sup>1</sup> (Max)	40 km	50 km
Reflection Event Dead Zone <sup>2</sup>	< 50 m	
Non-Reflection Event Dead Zone <sup>3</sup> (3dB)	< 210 m	
Power Supply	4 AA Size Alkaline 1.5 Volt Batteries	
Distance Accuracy (Reflective Event Detection)	$\pm 4 \text{ m} + 2 \times 10^{-3} \times \text{Distance}$	

Note:

1. Tested with Corning SMF-28
2. Reflective type connection could be normal adaptive connectors, normal mechanical splice connections or high return loss fiber breakage faults.
3. Non-Reflective type connection could be fusion splice connection or excessive bending point or fiber breakage faults @ 2dB and 3dB loss.
4. Measurements are made in 23+/- 2oC environment
5. All specifications are subject to change without notice.

# Specifications

Dimension	228 (L) x 110 (W) x 55(H) mm (with bumper)
Weight	600 g
Temperature	Operating: 0 to +40°C Storage: -10 to +60°C
Humidity	0 to 85 %
Memory	Up to 550 measurements
Connector	SC or LC (optional)



Typical application of Fiber Ranger

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