

mini-OTDR

FiberRanger3

Description

The Wilcom FiberRanger3 is a lightweight, hand-held **mini-OTDR** in a rugged enclosure that is impact-resistant and waterproof. The fast easy-to-use Optical Time Domain Reflectometer with core functions required to measure optical fiber from one end during installation, repair and verification. This unit is ideal for field and maintenance of new or existing fiber networks.

The mini-OTDR is very fast, producing a scan within one second of pressing the scan button. It also features an easy to use Zoom function that enables the user to observe the entire link, or zoom in on defects. This unit is available in multimode or singlemode with single, dual, tri, or quad wavelengths making it ideal for LAN, Metro or Fiber-to-the-Home (FTTH) applications.



Each unit is capable of measuring splice loss, link attenuation and distance. The singlemode and or multimode output port(s) use high powered pulsed lasers. The QVGA monochrome display provides a powerful yet simple set of fiber parameters and control indications to view an entire fiber link or zoom in and analyze a splicing point or a defect in the fiber. The display shows fiber loss versus distance in its large central graph as well as individual and dual cursor measurements, and important instrument parameters such as Index of Refraction, pulse width, scanning speed, and a battery gauge.

The FiberRanger3 is a full-function Certifying OTDR when used with the Certification Software. View and store traces in the field, then download traces to a PC for further analysis and printing of the certifying documents.

Features and Benefits

✓ Rugged Plastic Enclosure

With the lid closed and locked, and the purge port tightened, this enclosure is air and water-tight.

✓ Internal Data Storage and Data Output

The ability to store 255 traces and export them to a printer or PC for future analysis are additional useful features of the FiberRanger3.

✓ Event Table and Auto Test Mode

In Event Table mode, up to 10 possible events will be displayed along with a link analysis at the bottom. In Auto Test mode, the unit automatically searches for the end of fiber.

✓ One Button SCAN Operation

This is complimented by cursor keys and "soft-keys", allowing the user to observe the entire link loss or zoom in on defects.

✓ OTDR Trace Viewing

The OTDR trace viewing capability enables a highly versatile troubleshooting tool in a cost-effective package.

✓ Certification Software Included

The mini-OTDR is a full-function Certifying OTDR when used with the Certification Software.



"C" Series

Distance Range	1Km/3.3Kft (SP) 4Km/13Kft (MP) 16Km/53Kft (LP)	4Km/13.3Kft (XSP) 16Km/53Kft (XMP) 64Km/215Kft (XLP)
Pulsewidths	Short Pulse (SP) 4m/13ft Medium Pulse (MP) 50m/164ft, Long Pulse (LP) 100m/330ft	
Dead Zone	6m/20ft typical (SP)	
Distance Interval	1m/3.3Kft (SP) 4m/13ft (MP) 16m/53ft (LP)	2m/6ft (XSP) 8m/25ft (XMP) 32m/105ft (XLP)
Horizontal Expansion	4Km/8Kft, 2Km/4Kft, 1Km/2Kft, 500m/1Kft / div (LP) 1Km/2Kft, 500m/1Kft, 256m/512ft, 128m/256ft / div (MP) 256m/512ft, 128m/256ft, 64m/128ft, 32m/64ft / div (SP) 16Km/32Kft, 8Km/16Kft, 4Km/8Kft, 2Km/4Kft/ div (XLP) 4Km/8Kft, 1Km/2Kft, 512m/1Kft, 256m/512ft/ div (XMP) 1Km/2Kft, 512m/1Kft, 256m/512ft, 128m/256ft/ div (XSP)	
Loss Modes	2 Point, Splice Loss, dB/km	
Optical Connection	ST or FC/UPC	
CDRH Laser Classification	Class I	
Wavelength of Operation	850 ,1300, 1310, 1490, & 1550 nm +/- 20nm	
Dynamic Range	23 dB Typical (LP)	
Distance Accuracy	+/- (1meter + .01% x distance)	
Units of Measure	Meters/Kilofeet	
Group IOR Range	1.024 - 2.048	
Vertical Expansion	0.5, 1, 2, 4 dB/div	
Vertical Resolution	0.01dB	
Data Acquisition Method	N-Point Averages	
Averaging Time	0.25 seconds (Real Time) up to 1 min. (Scanning)	
Data Storage	255 traces	
Computer/Printer Interface	RS-232	
Power	8 NiMH AA cells, or 120VAC charger	
Battery Life	12 hrs. typical	
Size	8.25 x 6.5 x 3.5 in. (20.96 x 16.51 x 8.89cm)	
Weight w/ batteries	2.75 lbs (1.25 Kg)	
Operating Temperature	0°C to +50°C	
Storage Temperature	-40°C to +60°C	
CE	Compliant	

Warranty

The Wilcom FiberRanger3 is warranted for a period of one year to be free of defects in material and workmanship.

Specifications and prices are subject to change without notice.
813-141-014 07/07
ISO - 9001:2000 Registered

Ordering Information

30500 XXX - YY - ZZ

ZZ - Output Port Connector Option
SM Port (QUAD Only)
15 - FC/UPC - w/110VAC Charger
16 - ST/UPC - w/110VAC Charger
25 - FC/UPC - w/220VAC Charger
26 - ST/UPC - w/220VAC Charger

YY - Output Port Connector Option
MM Port (QUAD Only)
15 - FC/UPC - w/110VAC Charger
16 - ST/UPC - w/110VAC Charger
25 - FC/UPC - w/220VAC Charger
26 - ST/UPC - w/220VAC Charger

<u>XXX</u> - Model	Description	Wavelength
040 -FR3-S-C ⁽¹⁾	Singlemode,	1310nm
035 -FR3-M-C ⁽¹⁾	Multimode,	1300nm
045 -FR3-SD-C ⁽¹⁾	Singlemode,	1310/1550nm
050 -FR3-S1-C ⁽¹⁾	Singlemode,	1550nm
055 -FR3-M1-C ⁽¹⁾	Multimode,	850nm
060 -FR3-MD-C ⁽¹⁾	Multimode,	850/1300nm
095 -FR3-TRI-C ⁽¹⁾	Singlemode,	1310/1490/1550nm
100 -FR3-QUAD-C ⁽¹⁾	MM/SM	850/1300nm 1310/1550nm

NOTE:

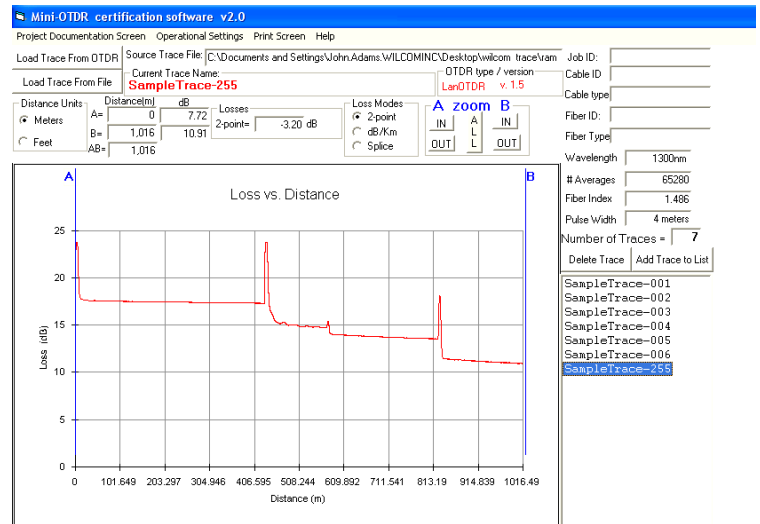
⁽¹⁾ Included with the FR3 mini-OTDR is an AC charger and Certification Software.

Example 1: Part # 30500100-16-15

Translates to: FR3-QUAD-C, ST on MM port, FC on SM port, 110VAC charger

Example 2: Part # 30500045-25

Translates to: FR3-SD-C, FC connector, 220VAC charger



Example of trace display with Certification Software

Wilcom

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