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OptiFiber® Smart Remote Options

The use of fiber in premise networks is continually growing – and so are the requirements for testing and certifying it. Fluke Networks' OptiFiber Certifying OTDR is a multi-function fiber tester designed for ease-of-use and efficient operation when certifying and troubleshooting premise fiber. Most industry standards and customer work statements require insertion loss measurements to certify a fiber link. With OptiFiber's optional loss/length modules and an OptiFiber Smart Remote option, you can have the same powerful insertion loss certification capability as found with the fiber test adapters that come with our copper certification testers. No other product hands you a more complete solution for insertion loss certification than the OptiFiber Certifying OTDR.

Only OptiFiber offers an OTDR module that integrates both OTDR certification and loss/length certification, minimizing the number of tools you need to carry with you into the field. With link certification requiring compatible test equipment at both ends of the link under test, OptiFiber Smart Remote options provide just what you need to meet this requirement at a third of the price of previous options.

With OptiFiber Smart Remote options, you can:

- Test two fibers at a time, each at two wavelengths, measure insertion loss and length
- Double productivity by using dual-wavelength testing
- Measure fiber length with the time of flight technique
- Compare the results to a built-in test standard or a user-defined test limit
- Perform bi-directional testing without having to swap main and remote test equipment
- Quickly illuminate the location of fiber breaks, pinches, and tight bends using the built in VFL (Visual Fault Locator)
- Quickly save all fiber link data with LinkWare™ Cable Test Management Software

OptiFiber Main Unit

OptiFiber Smart Remote with Fiber Module

Increase your loss/length certification capability with OptiFiber® Smart Remote options.

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Specifications

DTX-1200 Smart Remote Unit (OFSR-MMREM)

General Specifications	
DC input	15 VDC
AC adapter/charger	Input: 120/240 VAC, 50/60 Hz Output: 15 VDC
Battery	Rechargeable lithium ion
Battery life	10 hours, typical
Recharge time	4 hours, typical
Communications port	USB, mini B connector
Re-calibration period	1 year
Dimensions	8.5" x 4.4" x 2.4" (21.6 cm x 11.2 cm x 6 cm), nominal
Weight	2.4 lbs (1.1 kg), nominal
Environmental Specifications	
Operating temperature	0°C to 40°C
Storage temperature	-20°C to 60°C
Relative humidity (%RH operating without condensation)	95% (10 to 35°C) 75% (35 to 40°C) uncontrolled < 10°C
Vibration	Random, 2 g, 5-500 Hz
Shock	1 m drop onto all corners and faces, test cables not attached
Safety	CSA C22.2 No. 1010.1: 1992 EN 61010-1 1st. Edition + Amendments 1, 2 CE
Altitude	3000 m
EMC	EN 61326-1

DTX-MFM Multimode Module (OFSR-MMREM, OFSR-MFM) and DTX-SFM Singlemode Module (OFSR-SFM) (continued)

VFL Specifications (23°C)	
Output power[6]	≤ 1.0 mw
Operating wavelength	650 nm nominal
Output modes	Continuous wave and pulsed mode
Connector adapter	2.5 mm universal
Laser safety	Class II CDRH
Environmental Specifications	
Operating temperature	0°C to 40°C
Storage temperature	-20°C to 60°C
Relative humidity (%RH operating without condensation)	95% (10 to 35°C) 75% (35 to 40°C) uncontrolled <10°C
Vibration	Random, 2 g, 5-500 Hz
Shock	1 m drop onto all corners and faces, test cables not attached
Safety	CSA C22.2 No. 1010.1: 1992 EN 61010-1 1st. Edition + Amendments 1, 2 CE
Altitude	3000 m
EMC	EN 61326-1
General Specifications	
Dimensions	4.2" x 3.0" x 1.1" (106 mm x 76 mm x 28 mm), nominal
Weight	4.6 oz (0.13 kg), nominal

DTX-MFM Multimode Module (OFSR-MMREM, OFSR-MFM) and DTX-SFM Singlemode Module (OFSR-SFM)

Optical Specifications (23°C)[1]	
Input/output (meter/source) connectors	SC/SC
Source type and nominal wavelength	DTX-MFM: 850 nm LED and 1300 nm LED DTX-SFM: 1310 nm FP LD and 1550 nm FP LD
Source wavelengths	DTX-MFM: 850 ±30 nm, 1300±20nm DTX-SFM: 1310 ±20nm, 1550±30nm
Source power	DTX-MFM: ≥ -20 dBm at 850/1300 nm DTX-SFM: ≥ -7 dBm at 1310/1550 nm
Source power stability, 8 hour	DTX-MFM: ±0.1 dB at 23°C (25 min warm up) DTX-SFM: ±0.25 dB at 23°C (25 min warm up)
Length measurement[2]	DTX-MFM: 0-5,000 m of 62.5 or 50 µm fiber DTX-SFM: 0-10,000 m of 9 µm singlemode fiber
Length measurement accuracy	±1.5 m ±2% of length
Power meter type	InGaAs detector
Power meter calibrated wavelengths	850 nm, 1310 nm, 1550 nm
Power measurement range	0 to –60 dBm (1310 nm and 1550 nm) 0 to -52 dBm (850 nm)
Power measurement uncertainty[3] **(accuracy)**	± 0.25 dB
Measurement linearity	±0.1dB (1310 nm and 1550 nm)[4] ±0.2dB (850 nm)[5]
Display resolution dB or dBm µW >400, >40, >4, >0.4, ≤0.4	 0.01 1, 0.1, 0.01, 0.001, 0.0001
Display update rate	1 reading per second
Re-calibration period	1 year

1 At 23°C unless otherwise specified.

2 In Smart Remote mode, length is length between main and smart remote units.

3 Power level -20 dBm, continuous wave, 62.5/125 at 850 nm, 9/125 at 1310 and 1550 nm

4 For 1310 and 1550 nm, ±0.1 dB from 0 to -55 dBm, ±0.2 dB <-55 dBm

5 For 850 nm, ±0.2 dB from 0 to -45 dBm, ±0.25 dB <-45 dBm

6 Into SMF-28 singlemode fiber, continuous wave and pulse modes, SC/UPC connector

Ordering Information

OptiFiber Smart Remote Options for Loss/Length Certification

Model **OFSR-MMREM**	**Description** Smart Remote with Multimode Option
	Use Use with OptiFiber mainframe for Multimode Option Smart Remote Loss/Length certification. Includes Smart Remote unit with a multimode module and accessories.
Model **OFSR-SFM**	**Description** Singlemode Smart Remote Module Option
	Use Use with the OptiFiber Smart Remote option (OFSR-MMREM) for Smart Remote loss/length certification of singlemode fibers. Can also be used with a DTX Cable Analyzer copper tester to allow its remote unit to work with an OptiFiber mainframe as an OptiFiber Smart Remote unit for loss/length testing of singlemode fibers
Model **OFSR-MFM**	**Description** Multimode Smart Remote Module Option
	Use Use with a DTX Cable Analyzer copper tester to allow its remote unit to work with an OptiFiber mainframe as an OptiFiber Smart Remote unit for loss/length testing of multimode fibers
Model **OF-500-10**	**Description** OptiFiber Certifying OTDR
	Use Use as a Smart Remote unit for loss/length testing of multimode fibers. In addition, it allows users to view and capture end faces, do ChannelMap™ testing, and capture OTDR traces at the far end of a fiber link.

NETWORKSUPERVISION

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Fluke Networks operates in more than 50 countries worldwide. To find your local office contact details, go to **www.flukenetworks.com/contact**.

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