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Test & Measurement

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 This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.
 TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.
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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 multifunction 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.

FLUKE networks.

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



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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	95% (10 to 35°C)	
(%RH operating	75% (35 to 40°C)	
without condensation)	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	95% (10 to 35°C)	
(%RH operating	75% (35 to 40°C)	
without condensation)	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: \geq -20 dBm at 850/1300 nm
	DTX-SFM: \geq -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 $\pm 2\%$ 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	0.01
µW >400, >40, >4, >0.4, ≤0.4	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</p>
- 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	Description
OFSR-MMREM	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 Smart Remote module
	and accessories.
Model	Description
OFSR-SFM	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	Description
OFSR-MFM	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	Description
0F-500-10	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.

N E T W O R K S U P E R V I S I O N

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