

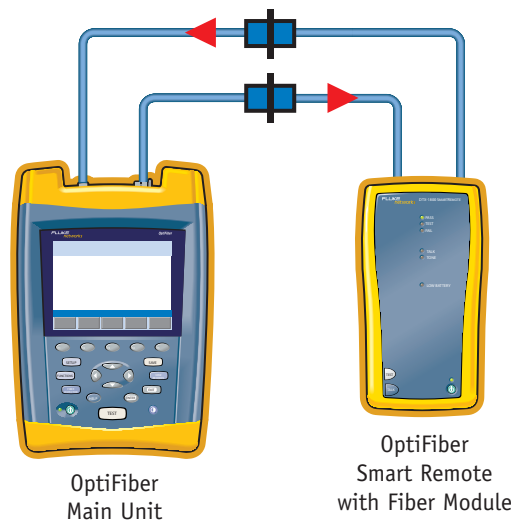
OptiFiber® Smart Remote Options

The use of fiber in premises networks is continually growing – and so are the requirements for testing and certifying it. To ensure the performance of mission-critical infrastructure, network owners are demanding a more complete picture of their fiber plant. Fluke Networks' OptiFiber Certifying OTDR is the complete fiber test solution for certifying and troubleshooting premises fiber cabling. Most industry standards and customer work statements require optical loss and length measurements to certify fiber optic links. With OptiFiber's optional loss/length modules and an OptiFiber Smart Remote option, you can have the same powerful loss/length certification capability found with the fiber test modules that work with our popular DTX CableAnalyzer. No other product gives you a more complete solution for premises fiber certification than the OptiFiber Certifying OTDR.

Fluke Networks offers modules for the OptiFiber Certifying OTDR that integrate both OTDR and loss/length certification, minimizing the number of tools you need to carry with you into the field. Industry standards require certification with a power meter and source that can measure the loss and length of a fiber optic link. OptiFiber Smart Remote options provide just what you need to meet this requirement.

With OptiFiber Smart Remote options, you can:

- Test two fibers at a time, each at two wavelengths, measure optical loss and length.
- Double productivity by using dual-wavelength testing.
- Measure fiber length.
- Compare the results to a built-in industry 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, and tight bends using the built in VFL (Visual Fault Locator).
- Quickly save all fiber link data with LinkWare™ Cable Test Management Software.



Ordering Information

OptiFiber Smart Remote Options for Loss/Length Certification

Model	Description
OFSR-MMREM	Smart Remote with Multimode Option Use with OptiFiber mainframe for Multimode Option Smart Remote Loss/Length certification. Includes Smart Remote unit with a multimode module and accessories.
OFSR-SFM	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 CableAnalyzer 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
OFSR-MFM	Multimode Smart Remote Module Option Use with a DTX CableAnalyzer 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

DTX-1200 Smart Remote Unit (OFSR-MMREM) Specifications

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

DTX Fiber Modules Extended Specifications

Optical Specifications ¹	
Testing speed (worse case not including reference measurement)	- Far end source mode (1): ² 4.5 s - Loopback mode (2, 2 fibers, auto OLB and pass/fail): ² 5 s - Smart remote mode (2, 2 fibers, auto OLB and pass/fail): ² 12 s - FindFiber mode: ² 3 s
Input/output (meter/source) connectors	Removeable adapter on fiber optic power meter (input port.) Removable SC adapter included with product. Optional removable adapters: LC, ST and FC
Output (Source) connectors	Fixed SC adapter
Source type and nominal wavelength	DTX-MFM2: 850 ±30 nm, 1300 ±20 nm; DTX-SFM2: 1310 ±20 nm, 1550 ±30 nm; DTX-GFM2: 850 ±20 nm, 1310 ±20 nm
Source spectral width (FWHM)	DTX-MFM2: 30-60 nm at 850 nm, 100-140 nm at 1300 nm
Source power	DTX-MFM2: ³ -20 dBm at 850/1300 nm; DTX-SFM2: ³ -7 dBm at 1310/1550 nm; DTX-GFM2: ³ -7 dBm at 850/1300 nm
Source power stability ²	DTX-MFM2: ±0.1 dB over 8 hours; DTX-SFM2: ±0.25 dB over 8 hours; DTX-GFM2: ±0.25 dB over 8 hours
Length measurement ³	DTX-MFM2: 0-5,000 m of 62.5 or 50 µm fiber; DTX-SFM2: 0-10,000 m of 9 µm singlemode fiber DTX-GFM2: 0-5,000 m of 62.5 or 50 µm fiber
Length measurement accuracy	±1.5 m ±2% of length
Propagation time accuracy	±15 ns ±2% of propagation time
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 ⁴ (accuracy)	±0.25 dB
Measurement linearity	±0.1 dB ⁵ (1310 nm and 1550 nm); ±0.2 dB ⁶ (850 nm)
Display resolution, dB or dBm µW >400, >40, >4, >0.4, ² 0.4	0.01; 1, 0.1, 0.01, 0.001, 0.0001
Display update rate	1 reading per second
Dynamic range (unit communications and length measurement)	DTX-MFM2: ³ 12 dB; DTX-SFM2: ³ 22 dB; DTX-GFM2: ³ 22 dB
Re-calibration period	1 year
VFL Specifications	
Output power ⁷	² 1.0 mW
Operating wavelength	650 nm nominal
Output modes	Continuous wave and pulse mode
Connector adapter	2.5 mm universal
Laser safety	Class II CDRH

Above specifications are subject to change without notice

¹ At 23°C unless otherwise specified. ² After five-minute warm-up time. ³ In Loopback mode, length is total fiber length. In Smart remote mode, length is length between main and smart remote units. ⁴ Power level -20 dBm, continuous wave, 62.5/125 at 850 nm, 9/125 at 1310 and 1550 nm ⁵ For 1310 and 1550 nm, ±0.1 dB from 0 to -55 dBm, ±0.2 dB < -55 dBm

⁶ For 850 nm, ±0.2 dB from 0 to -45 dBm, ±0.25 dB < -45 dBm ⁷ Into SMF-28 singlemode fiber, continuous wave and pulse modes, SC/UPC connector

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 1 st . Edition + Amendments 1, 2 CE
Altitude	3000 m
EMC	EN 61326-1
General Specifications	
Dimensions (L x W x D), nominal	4.2 in x 3.0 in x 1.1 in (106 mm x 76 mm x 28 mm)
Weight, nominal	0.31 lb (0.14 kg)

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 CableAnalyzer 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 CableAnalyzer to allow its remote unit to work with an OptiFiber mainframe as an OptiFiber Smart Remote unit for loss/length testing of multimode fibers

