

# DTX Compact OTDR

*Turn your cable tester into an OTDR*

*How much time would you save if you had one tool to test and certify the copper and fiber cable plant?*

*How many installation jobs would you win if you could add a full-featured OTDR onto your current list of test tools?*

*How much profit do you lose when you subcontract fiber work to dedicated fiber specialists?*

**See how the new DTX Compact OTDR is the answer.**



## A platform for growth

The DTX Compact OTDR is a revolutionary enhancement to the DTX CableAnalyzer.™ It turns your cable tester into an OTDR, so you can expand your business and your profitability by winning jobs you previously could not have performed. That's Fluke Networks' promise to you. That's Network SuperVision.™

## The biggest advance in cable testing since the DTX CableAnalyzer

The DTX Compact OTDR is a full featured Optical Time Domain Reflectometer (OTDR) module that snaps onto a DTX CableAnalyzer. In addition to copper testing, it makes this powerful certification tool a complete, easy-to-use OTDR that shoots and analyzes traces on singlemode and multimode fiber.

The DTX CableAnalyzer is the industry's benchmark for cable certification. With the DTX Compact OTDR, the DTX CableAnalyzer becomes the only cable tester that can completely certify copper and fiber cabling according to all industry standards.

The DTX Compact OTDR makes every technician a fiber expert with unparalleled ease of use, automatic OTDR settings, loss limits for events and fiber links, launch fiber compensation, automatic event analysis, and results management, all with the familiar user interface of the DTX CableAnalyzer.



## One platform, many advantages

The DTX Compact OTDR leverages a contractor's investment in the DTX CableAnalyzer by:

- Expanding installation revenue without expanding staff.
- Shortening technicians' learning curve for fiber testing.
- Performing Basic (Tier 1) and Extended (Tier 2) fiber certification with a single tool.
- Accelerating troubleshooting with a powerful, single-ended OTDR for fiber and extensive DTX diagnostics for copper.
- Delivering integrated copper and fiber reports using LinkWare™ Results Management Software.

**Make every technician a fiber expert**

## Fiber testing and certification

New applications are demanding higher bandwidth. The standards for higher bandwidth cabling require tight loss budgets, which in-turn demands thorough fiber testing. To ensure application success, it is important to test fiber on three criteria:

1. To the standards specified in the system design.
2. To the specifications defined in the installation contract.
3. To meet the needs of future applications and network services.

Thorough fiber testing is done with two tiers of certification: “Basic” or “Tier 1” fiber certification and “Extended” or “Tier 2” fiber certification. The details of certification are identified by the TIA and ISO standards bodies.

Basic fiber certification uses a Loss/Length test to measure end-to-end attenuation on a fiber link. Measured loss is compared to the maximum loss allowed according to the industry standards for that application.

Extended fiber certification requires an OTDR trace to characterize the individual components of a fiber link: connectors, splices and other loss events.

Extended fiber certification is critical because it identifies faults that may be invisible to Basic fiber certification. Good practice for fiber certification does not allow a hidden problem that may impact future performance to remain undocumented, if it can be identified and fixed before services are deployed.

Successful Basic fiber certification is evidence that the entire fiber link meets standards. Successful Extended fiber certification is evidence that every component in the fiber link was properly installed.

Loss (M->R)		PASS
Input Fiber		
1300 nm	Loss: 0.92 dB Limit: 2.30 dB Margin: 1.38 dB	This fiber passes the Loss/Length test, or Basic fiber certification, because it has less end-to-end loss than allowed.
850 nm	Loss: 1.20 dB Limit: 3.36 dB Margin: 2.16 dB	
Press SAVE when		Reflection 50.1 m
Other Dir.		850 nm 1300 nm
Loss (dB)		Status: FAIL PASS
Value:		0.79 0.48
Limit:		0.75 0.75
Margin:		-0.04 0.27
Reflectance (dB)		Value: -48.55 -30.29
Event		
Overall Results	Previous Event	Next Event

A poorly terminated connector on the same fiber is discovered by Extended fiber certification using the DTX Compact OTDR.

## Complete fiber certification with the DTX CableAnalyzer

Using the DTX CableAnalyzer's singlemode and multimode fiber modules, one press of a button automatically performs a Loss/Length test on two fibers at two wavelengths, and determines their pass or fail status.

The DTX Compact OTDR makes Extended fiber certification an easy process as well. A single test checks every connector and splice on a link to ensure the fiber cabling meets the defined specifications.

With fiber modules for Basic fiber certification and the DTX Compact OTDR for Extended fiber certification, the DTX CableAnalyzer platform fully certifies a fiber plant.

## OTDR solutions from Fluke Networks

Fluke Networks' OTDR products are tailored to meet the needs of technicians who install and operate enterprise networks. They feature breakthrough technology developed over decades of leadership in the test equipment business.

The DTX Compact OTDR enables any technician to test fiber like an expert. It helps contractors successfully install fiber optic cabling, and win jobs that require fiber certification.

Fluke Networks complements the DTX Compact OTDR with the OptiFiber™ Professional OTDR. OptiFiber is an advanced multi-function fiber tester that helps enterprise network owners avoid and reduce downtime in their networks.

The OptiFiber Professional OTDR is designed for technicians that maintain fiber cabling in data center and campus fiber networks. OptiFiber combines multiple troubleshooting tools, a fiber endface inspector and the power of an optical loss test set to deliver the most advanced OTDR capabilities for network owners.



## Model Comparison

Model	DTX-1800-MSO	DTX-QUAD-OTDR	DTX-OTDR-KIT	DTX-OTDR/LL-KIT	DTX-OTDR-QMOD
Description	Complete DTX certification and troubleshooting kit	Full functioning DTX Compact OTDR	Compact OTDR kit for DTX owners	Complete fiber kit for DTX owners	Compact OTDR for DTX owners
850/1300/1310/1550 DTX Compact OTDR	•	•	•	•	•
DTX 1800 Mainframe	•	•			
DTX Smart Remote	•				
Set of Copper Permanent Link Adapters & Channel Adapters	•				
Fiber Accessories	•			•	
Singlemode, Multimode Launch Fibers (50 um, 62.5 um)	•		•	•	
FiberInspector Mini	•				
Fiber Optic Cleaning Kit	•		•	•	
Standard Protective Carrying Case for DTX CableAnalyzer	•				
Protective Carrying Case for DTX Compact OTDR and Accessories	•	•	•	•	•
Multimode Fiber Module Set (loss/length)	•			•	
Singlemode Fiber Module Set (loss/length)	•			•	



DTX Compact OTDR Kit



DTX Compact OTDR module



FiberInspector Mini



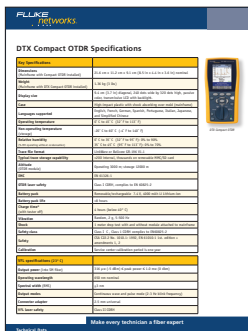
Fiber Modules

## Ordering Information

Model Number	Description
<b>DTX-1800*</b>	<b>DTX-1800 CableAnalyzer</b> Includes DTX main and smart remote, Linkware PC software, 16 MB MMC card, set of Cat 6/ClassE Permanent Link and channel adapters, 2 headsets, 2 AC chargers, USB interface cable (mini B), serial RS232 cable (IEEE 1394 to DB9) users manual and carrying case.
<b>DTX-1800-MSO*</b>	<b>DTX 1800 Copper/Fiber/OTDR Kit</b> Includes DTX-1800 CableAnalyzer, sets of multimode DTX MFM2 and singlemode DTX SFM2 Fiber (loss/length) modules, DTX Compact OTDR, launch fibers, accessories and carrying case.
<b>DTX-QUAD-OTDR*</b>	<b>DTX 1800 QUAD OTDR Kit</b> Includes DTX-1800 CableAnalyzer mainframe and DTX Compact OTDR and carrying case.
<b>DTX-OTDR-KIT</b>	<b>DTX OTDR Compact add-on Kit</b> Includes DTX Compact OTDR, launch fibers, accessories and carrying case.
<b>DTX-OTDR/LL-KIT</b>	<b>DTX Compact OTDR and Loss Length Kit</b> Includes sets of multimode DTX MFM2 and singlemode DTX SFM2 Fiber (loss/length) modules, DTX Compact OTDR, launch fibers, accessories and carrying case.
<b>DTX-OTDR-QMOD</b>	<b>850/1300/1310/1550 DTX OTDR Module</b> Includes DTX Compact OTDR module and carrying case.
Support Options	Description
<b>GLD-DTX**</b>	<b>DTX Gold Support:</b> Includes no-charge repair, loaner kit, no-charge replacement of accessories, no-charge software or firmware upgrades, unlimited 24x7 multilingual technical support, unlimited access to knowledge base and online training, 20% discount on all in-person or on-site training programs, priority access to the used equipment list, and members only discounts on select products and enhancements.
<b>GLD-DTX-FIBERMOD</b>	<b>DTX Compact OTDR Gold Support:</b> Includes no-charge repair, loaner kit, no-charge replacement of accessories, no-charge software or firmware upgrades, unlimited 24x7 multilingual technical support, unlimited access to knowledge base and online training, 20% discount on all in-person or on-site training programs, priority access to the used equipment list, and members only discounts on select products and enhancements.

\*Regionalized versions available.

\*\*This includes up to one pair of interface adapters and one pair of personality modules per year.



DTX Compact OTDR™ Specifications  
Guide # 3039876

### NETWORK SUPERVISION

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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](http://www.flukenetworks.com/contact).

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## ▶▶ DTX Compact OTDR

Fluke Networks Compact OTDR module is the latest enhancement to the DTX CableAnalyzer. In addition to performing copper certification and diagnostics, your team can become fiber test experts when you decide to grow your business and turn your cable tester into an OTDR. This full featured, compact OTDR module snaps onto a DTX CableAnalyzer and provides unmatched ease of use for premises fiber testing. Choose a kit that includes a DTX mainframe and smart remote, options for copper certification, optical loss/length capability, or order a module and software that can be installed on a your own DTX CableAnalyzer.

- Turn your cable tester into an OTDR
- Test and troubleshoot fiber like an expert with easy-to-use DTX Compact OTDR
- Shoot OTDR traces on singlemode and multimode links at 850 nm, 1300 nm, 1310 nm, 1550 nm
- Perform extended Tier 2 certification with one powerful cable tester

**Complete DTX 1800 Copper/Fiber Certification Kit (DTX-1800-MSO)** Choose this option if you install and maintain premise networks with both copper and fiber. Includes a mainframe and Smart Remote along with the complete package of testing and troubleshooting options.

**Copper/Multimode Fiber Certification Kit (DTX-1800-MO)** Choose this option if you install or certify copper and fiber in datacenters. Includes a DTX-1800 mainframe, a Smart Remote, two multimode DTX MFM2 Fiber Modules, and one DTX Compact OTDR Module.

**DTX Compact OTDR Starter Kit (DTX-QUAD-OTDR)** Choose this option if you are looking for an OTDR for fiber troubleshooting and extended certification. Copper and Tier 1 fiber certification can be added later with addition of a Smart Remote and other options and accessories.

### DTX Compact OTDR Module (DTX-OTDR-QMOD)

Choose this option if you already own a DTX mainframe and want to add OTDR capability and want to purchase launch fibers separately.

### DTX Compact OTDR Kit (DTX-OTDR-KIT)

Choose this option if you own a DTX CableAnalyzer with loss/length fiber capability and want to add an OTDR option and accessories.

### DTX Fiber Certification Kit (DTX-OTDR/LL-KIT)

Choose this option if you own a DTX CableAnalyzer without fiber capability. This kit will give you complete fiber certification and troubleshooting capability.

Model	DTX 1800-MSO	DTX-QUAD-OTDR	DTX-OTDR-KIT	DTX-OTDR/LL-KIT	DTX-OTDR-QMOD	DTX-1800-MO
850/1300/1310/1550 OTDR Module	•	•	•	•	•	•
DTX-1800 Mainframe	•	•				•
DTX Smart Remote	•					•
Copper accessories	•					•
Fiber accessories	•			•		
Launch fibers	•		•	•		
FiberInspector Mini	•					
Fiber Optic Cleaning Kit	•		•	•		
Standard protective carrying case for DTX CableAnalyzer	•					
Protective carrying case for DTX Compact OTDR and fiber accessories	•	•	•	•	•	
Set of Multimode Fiber Modules (MFM2)	•			•		•
Set of Singlemode Fiber Modules (SFM2)	•			•		
Gold Support	GLD-DTX-MSO	DTX-QUAD-OTDR 120	DTX-OTDR-KIT	DTX-OTDR/LL-KIT	GLD-DTX-OTDR	GLD-DTX-MO

## Loss/Length (Tier 1) Fiber Certification



### ▶▶ DTX Fiber Modules

Add loss/length fiber certification capability to your DTX CableAnalyzer. Certify fiber loss, length and polarity quickly and simply with the one-button Autotest. Featuring automated testing of two fibers, each at two wavelengths, optical length measurement and pass/fail analysis. The fastest test solution that yields the greatest time and cost savings. Troubleshoot problems visually with the built-in VFL. Save, upload and report results using LinkWare PC software. Available multimode and singlemode modules enable certification of both fiber types.

Model	Description
DTX-MFM2	Multimode 850 and 1300 nm
DTX-SFM2	Singlemode 1310 and 1550 nm
GLD-DTX-FIBERMOD	1-year of Gold Support – DTX Fiber Module
GLD-DTXFMOD-3YEAR	3-years of Gold Support – DTX Fiber Module

See page 8 for the DTX CableAnalyzer copper options.



### ▶▶ DTX-CLT CertiFiber® Optical Loss Test Set

The DTX-CLT CertiFiber® OLTS enables you to easily and accurately certify two fibers concurrently over two wavelengths according to custom requirements or established industry specifications. Quickly and efficiently conduct troubleshooting with a convenient integrated Visual Fault Locator (VFL).

- 12 second Autotest – loss measurement of two fibers at two wavelengths, optical link budget calculation, and a PASS/FAIL analysis
- Fast and professional test result documentation via the widely-used LinkWare reporting software
- Optimized for applications ranging up to 10 Gig
- Interchangeable multimode and singlemode modules (which are also compatible with the popular DTX CableAnalyzer™ Series)
- Accurate fiber length measurement – eliminate haphazard guessing!
- Continuity and polarity verification
- Easy-to-use and widely-recognized DTX-based user interface
- On-board visual fault locator (VFL) to locate fibers and breaks
- Supports various small form factor (SFF) fiber connectors

Model	Description
DTX-CERTIFIBER-M	Multimode DTX-CLT CertiFiber – includes DTX-MFM2 and one set of 50 µm SC/SC test reference cords
DTX-CERTIFIBER-S	Singlemode DTX-CLT CertiFiber – includes DTX-SFM2 and one set of SM SC/SC test reference cords
DTX-CERTIFIBER-MS	Multimode and singlemode DTX-CLT CertiFiber – includes DTX-MFM2 and DTX-SFM2 and one set each of 50 µm and SM SC/SC test reference cords
DTX-CERTIFIBER/MU	Replacement mainframe for DTX-CLT CertiFiber
DTX-CERTIFIBER/RU	Replacement remote for DTX-CLT CertiFiber
GLD-DTX-FIBERMOD	1-year of Gold Support