

# DTX CableAnalyzer™ Ordering Information

Model Name	Product Description
DTX-1800 <sup>1</sup>	<b>DTX-1800 CableAnalyzer</b> – Includes DTX-1800 Main and Smart Remote, LinkWare PC Software, 128MB MMC Card, Cat 6A/Class EA Permanent Link Adapters (2), Cat 6/Class E Channel Adapters (2), Headsets for Talk (2), AC Chargers (2), Carrying Case, USB Interface Cable (Mini-B), Serial RS-232 Cable (IEEE 1394 to DB-9), User Manual
DTX-1200 <sup>1</sup>	<b>DTX-1200 CableAnalyzer</b> – Includes DTX-1200 Main and Smart Remote, LinkWare PC Software, Cat 6A/Class EA Permanent Link Adapters (2), Cat 6/Class E Channel Adapters (2), Headsets for Talk (2), AC Chargers (2), Carrying Case, USB Interface Cable (Mini-B), User Manual
DTX-LT <sup>1</sup>	<b>DTX-LT CableAnalyzer</b> – Includes DTX-LT Main and Smart Remote, LinkWare PC Software, Cat 6A/Class EA Permanent Link Adapters (2) (2), Cat 6/Class E Channel Adapter (1), AC Chargers, Carrying Case, USB Interface Cable (Mini-B), User Manual
DTX-MFM <sup>2</sup>	<b>DTX Multimode Fiber Modules</b> – Includes two modules one for Main and one for Smart Remote, 850nm and 1300nm LED sources combined into single output port, 850/1300/1310/1550 nm power meter, and integrated VFL
DTX-SFM <sup>2</sup>	<b>DTX Singlemode Fiber Modules</b> – Includes a set of two modules for Main and Smart Remote, 1310nm and 1550 nm laser sources combined into single output port, 850/1300/1310/1550 nm power meter and integrated VFL
DTX-1800-M	<b>DTX-1800 with Multimode Fiber Modules</b> – Includes DTX-1800 CableAnalyzer and a set of DTX-MFM2 Multimode Fiber Modules
DTX-1800-MS	<b>DTX-1800 with Multimode and Singlemode Fiber Modules</b> – Includes DTX-1800 CableAnalyzer and set of DTX-MFM Multimode Fiber Modules and DTX-SFM2 Singlemode Fiber Modules
DTX-1200-M	<b>DTX-1200 with Multimode Fiber Modules</b> – Includes DTX-1200 CableAnalyzer with set of DTX-MFM2 Multimode Fiber Modules
DTX-1200-MS	<b>DTX-1200 with Multimode and Singlemode Fiber Modules</b> – Includes DTX-1200 CableAnalyzer and set of DTX-MFM2 Multimode Fiber Modules and DTX-SFM2 Singlemode Fiber Modules
DTX-1800/SR	<b>DTX-1800 Smart Remote Add-on</b>
DTX-1200/SR	<b>DTX-1200 Smart Remote Add-on</b>
DTX-LT/SR	<b>DTX-LT Smart Remote Add-on</b>

## Accessories and Options

Model Name	Product Description	Model Name	Product Description
DTX-NSM	<b>Network Service Module for DTX Series</b> – (1) Link identifier, (2) Link connectivity check (port characteristics of active device, ping function) and (3) Power over Ethernet (POE) verification of voltage and polarity for 802.3af	DTX-CHA012	<b>Nexans GG45 Channel Adapter</b>
DTX-AXKIT	<b>Alien Crosstalk Kit for DTX Series</b> – Test and certify alien crosstalk performance with DTX-1800. Contains DTX-AXTLK1 Communication Modules, set of 2, Windows-based AxTALK Analyzer Software, link terminators (DTX-AXTERM), set of 2, and RJ45-to-RJ45 coupler, set of 2	DTX-TERA	<b>Siemon Tera Adapter Kit</b> – Includes Tera Channel Adapters (2) and Tera Permanent Link Adapters (2)
DTX-CHA001A	<b>Cat 6/Class E Channel Adapter</b>	DTX-PLA012	<b>Nexans GG45 Permanent Link Adapter</b> (available July 2009)
DTX-CHA001SA	<b>Cat 6/Class E Channel Adapters, set of 2</b>	DTX-GG45	<b>Nexans GG45 Adapter Kit</b> (available July 2009) – Includes GG45 Channel Adapters (2) and GG45 Permanent Link Adapters (2)
DTX-PLA002	<b>Cat 6A/Class EA Permanent Link Adapter</b> with centered Cat 6A/Class EA plug (one adapter – also used to test Cat 6/ Cat 5e and Cat 5 links with 8-pin modular jacks).	DTX-AXTERM	<b>Link Terminator for Alien Crosstalk Measurements</b> – set of 2
DTX-PLA002S	<b>DTX-PLA002S Cat 6A/Class EA Permanent Link Adapter</b> with centered Cat 6A/Class EA plug (also used to test Cat 6/ Cat 5e and Cat 5 links with 8-pin modular jacks) – set of two.	DTX-LION	<b>Lithium Ion Battery Pack</b>
DTX-PLA001	<b>Cat 6/Class E Permanent Link Adapter</b>	DTX-SER	<b>Serial RS232 Cable</b> (IEEE 1394 to DB-9)
DTX-PLA001S	<b>Cat 6/Class E Permanent Link Adapters, set of 2, with DSP-PM06</b>	DSP-MCR-U	<b>MultiMedia Card (MMC) Reader, USB</b>
DSP-PM06	<b>Cat 6 Centered Personality Module, set of 2</b> (to be used with DTX-PLA001 adapters)	LinkWare	<b>LinkWare Cable Test Management Software</b> – Free download at <a href="http://www.flukenetworks.com/linkware">www.flukenetworks.com/linkware</a>
DSP-PMxx	<b>Personality Modules for IDC and Legacy Cabling Systems</b> – A wide variety of modules are available for IDC-type connectors and legacy systems (to be used with DTX-PLA001 adapters)	LinkWare-Stats	<b>LinkWare Stats Statistical Report Option</b> – Results analysis software option for LinkWare
DTX-CHA011	<b>Siemon Tera Channel Adapter</b>	DTX-1218E	<b>DTX-1200 Enhancement Kit</b> – Upgrade DTX-1200 to DTX-1800
DTX-PLA011	<b>Siemon Tera Permanent Link Adapter</b>	DTX-LT18E	<b>DTX-LT Enhancement Kit</b> – Upgrade DTX-LT to DTX-1800
		DTX-LT12E	<b>DTX-LT Enhancement Kit</b> – Upgrade DTX-LT to DTX-1200

## Support Options

Model Name	Product Description
GLD-DTX	<b>DTX Gold Support</b> – Includes no-charge repair, loaner kit, no-charge scheduled annual calibration or performance verification, no-charge replacement of accessories, no-charge software or firmware upgrades, unlimited 7x24 multilingual technical support, unlimited access to KnowledgeBase and on-line 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
GLD-DTX-FIBERMOD	<b>DTX Fiber Module Gold Support</b> – Same above

<sup>1</sup> Available in 120V and International (120-240V) versions. 120V version includes English users manual. International version includes multi-language pack users manual.  
<sup>2</sup> This includes up to one pair of interface adapters and one pair of personality modules per year

# DTX CableAnalyzer™ Series Specifications

Cable Types	
<b>Shielded and unshielded twisted pair LAN cabling</b> (STP, FTP, SSTP, and UTP) <i>Note: For availability of additional adapters that allow testing to other performance standards, different cabling types, or fiber optic cabling, contact Fluke Networks.</i>	TIA Category 3, 4, 5, 5e, and 6A: 100 Ω ISO/IEC Class C and D: 100 Ω and 120 Ω ISO/IEC Class E, Class EA, Class F and Class FA: 100 Ω
Standard Link Interface Adapters	
<b>Cat 6A/Class EA permanent link adapters</b>	Plug type: shielded Cat 6A centered 8-pin modular plug (RJ45) Plug life: > 8000 insertions Tests supported: shielded and unshielded cable, TIA Cat 3, 4, 5, 5e, and 6 and ISO/IEC Class C, D and EA permanent link
<b>Cat 6/Class E channel adapters</b>	Plug type: shielded 8-pin modular socket (RJ45) Plug life: >10,000 insertions Tests supported: shielded and unshielded cable, TIA Cat 3, 4, 5, 5e, 6, and 6A and ISO/IEC Class C, D, EA channels
Test Standards	
<b>TIA</b>	Category 3 and Category 5e per TIA/EIA-568B Category 5 (1000BASE-T) per TIA TSB-95 Category 6 per TIA/EIA-568B.2-1 (Addendum #1 to TIA/EIA-568B.2) Category 6A per TIA/EIA-568B.2-10
<b>ISO/IEC</b>	11801 Class C, D and E 11801-2000 Class C, D and E, 11801 Amd 1 Class EA channel; Amd 2 Class EA permanent link 11801 Class F (DTX-1800 only)
<b>EN</b>	50173 Class C, D ,E 50173 Class F (DTX-1800 only)
<b>ANSI</b>	TP-PMD
<b>IEEE 802.3</b>	10BASE-T, 100BASE-TX, 1000BASE-T, 10GBASE-T
<b>IEEE 802.5</b>	(STP cabling, IBM Type 1, 150 Ω) Token Ring, 4 Mbps and 16 Mbps
General Specifications	
<b>Speed of Autotest</b>	Full 2-way Autotest of Category 6 Twisted-Pair links: <b>9 seconds or less</b> Full 2-way Autotest of ISO/IEC Class F links: <b>25 seconds</b>
<b>Supported test parameters</b> The selected test standard determines the test parameters and the frequency range of the tests	Wire Map, Length, Propagation Delay, Delay Skew, DC Loop Resistance, Insertion Loss (Attenuation), Return Loss (RL), RL @ Remote, NEXT, NEXT @ Remote, Attenuation-to-Crosstalk Ratio, ACR-N @ Remote, ARC from the far end (ACR-F) formerly named ELFEXT, ACR-F @ Remote, Power Sum, NEXT (PS NEXT), PSNEXT @ Remote, Power Sum ACR-N, PSACR @ Remote, Power Sum ACR-F (PS ACR-F) and PS ACR-F @ Remote.
<b>Cable tone generator</b>	Generates tones that can be detected by a tone probe such as a Fluke Networks IntelliTone™ probe. The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz
<b>Display</b>	3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.
<b>Input protection</b>	Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage
<b>Case</b>	High impact plastic with shock absorbing overmold
<b>Dimensions</b>	Main unit and Smart Remote: 8.5 in x 4.4 in x 2.4 in (21.6 cm x 11.2 cm x 6 cm), nominal
<b>Weight</b>	2.4 lb (1.1 kg), nominal (without adapter or module)
<b>Power</b>	
Main unit and remote:	Lithium-ion battery pack, 7.4 V, 4000 mAh
Typical battery life:	12 to 14 hours
Charge time* (with tester off):	4 hours (below 40° C)
AC adapter/charger, USA version:	Linear power supply; Input 108 V ac to 132 V ac, 60 Hz ; Output 15 V dc, 1.2 A
AC adapter/charger, international version:	Switching power supply; Input 90 V ac to 264 V ac, 47 to 63 Hz; Output 15 V dc, 1.2 A (isolated output)
Memory backup power in main unit:	Lithium battery
Typical life of lithium battery:	5 years
<b>Languages supported</b>	English, French, German, Spanish, Portuguese, Italian, Japanese, and Simplified Chinese
<b>Calibration</b>	Service center calibration period is 1 year

\* The battery will not charge at temperatures outside of 0° C to 45° C (32° F to 113° F). The battery charges at a reduced rate between 40° C and 45° C (104° F and 113° F).

Environmental Specifications		
Operating temperature	32° F to 104° F (0° C to 45° C)	
Storage temperature	-4° F to +140° F (-20° C to +60° C)	
Operating relative humidity (% RH without condensation)	32° F to 95° F (0° C to 35° C): 0 % to 90 % 95° F to 113° F (35° C to 45° C): 0 % to 70 %	
Vibration	Random, 2 g, 5 Hz -500 Hz	
Shock	1 m drop test with and without module and adapter attached	
Safety	CSA C22.2 No. 1010.1: 1992 EN 61010-1 1st Edition + Amendments 1, 2	
Pollution degree	Pollution Degree 2 as defined in IEC 60664 and applied to IEC 60950 'Safety of Information Technology Equipment, 1999'	
Altitude	Operating: 4000 m; Storage: 12000 m	
EMC	EN 61326-1	
Performance Specifications**		
Baseline accuracy	The baseline accuracy of all DTX Series testers meets or exceeds the requirements of Level IV as in draft 2nd Edition of IEC 61935-1 over the frequency range supported by the tester.	
Category 6A/Class EA link test modes (and lower link categories)	DTX CableAnalyzer far exceeds Level IIIe requirements of TIA/EIA-568-B.2-10 and IEC 61935-1.	
Class F link test modes	DTX-1800 is compliant with Level IV requirements as in the draft 2nd edition of IEC 61935-1.	
Length for Twisted Pair Cabling <sup>†</sup>		
Parameter	Single-ended test	Dual-ended test (Main and Remote)
Range	4000 ns	150 m (490 ft)
Resolution	1 ns	0.1 m or 1 ft
Accuracy	± (2 ns + 2%); 0 to 750 ns ± (2 ns + 4%); 751 to 4000 ns	± (2 ns + 2%)
Propagation Delay		
Parameter	Single-ended test	Dual-ended test (Main and Remote)
Range	4000 ns	750 ns
Resolution	1 ns	1 ns
Accuracy	± (2 ns + 2%); 0 to 750 ns ± (2 ns + 4%); 751 to 4000 ns	± (2 ns + 2%)
Delay Skew		
Parameter	Twisted Pair Cabling	
Range	0 ns to 100 ns	
Resolution	1 ns	
Accuracy	± 10 ns	
DC Loop Resistance Test		
Parameter	Twisted Pair Cabling	
Range	0 Ω to 53 Ω	
Resolution	0.1 Ω	
Accuracy	± (1 Ω + 1%)	
Overload recovery time	Less than 10 minutes to rated accuracy following over-voltage. Referencing is required after repeated or prolonged over-voltage.	

**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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\*\* Note: all specifications for tests on twisted-pair cabling apply to 100 Ω cable. Contact Fluke Networks for information on measurement performance for cable with a different impedance.

† Length specs do not include the uncertainty of the cable's NVP Value  
Above specifications are subject to change without notice.