



DTX CableAnalyzer™ significantly reduces your total time to certify.

The DTX CableAnalyzer™ Series from Fluke Networks is the testing platform for today - and tomorrow. This revolutionary platform significantly reduces total time to certify by improving every aspect of the testing process. It all starts with a Cat 6 Autotest time that's several times faster than other testers - and fiber testing that's five times faster. DTX also gives you a complete solution for 10 Gig testing over copper, Basic Tier 1 fiber testing, and Extended Tier 2 fiber testing with the industry's only modular OTDR. The DTX makes you ready for whatever the world throws at you - today and tomorrow.

DTX CableAnalyzer™
It's all about time.



# The DTX advantage: speed, performance and accuracy.

The DTX CableAnalyzer's powerful features, speed, and revolutionary platform make you more efficient and productive – and you can see the results on the bottom line. It's all about time – and no other tester delivers like DTX.

- Increase productivity from day one.
   Intuitive interface means your techs spend less time in training and more time testing.
- Certify 10 Gig Performance.
   The DTX-1800 with DTX 10 Gig Kit measures the performance for 10 Gigabit Ethernet and Alien Crosstalk (ANEXT and AFEXT) in full compliance with industry standards to 500 MHz.
- Zero to certified in 9 seconds.
   This unheard-of Cat 6 test speed lets you move from link to link three times faster than with previous testers.
- Level IV Accuracy. Get the most accurate test results in the shortest possible time.
- 900 MHz frequency range. Prepares you for future applications, such as
   10 Gigabit Ethernet, Class F and CATV.
- Advanced time-saving diagnostics.
   Pinpoints the location of a failure and is the only tester that suggests corrective action, saving trouble-shooting time.
- Complete fiber certification
   Certifies fiber to Tier 1 (Basic) and Tier 2
   (Extended) specifications using DTX Fiber
   Modules and the DTX Compact OTDR.
- 12-hour battery life. Gives you the power to complete any job.
- Save time managing results.
   From setup to reporting, LinkWare™ Cable
   Test Management Software's user interface and time-saving features increase
   productivity.

### Significantly reduces total time to certify.

The DTX Digital CableAnalyzer Series gives you a complete solution that streamlines every aspect of the certification job – from setup, to record-fast testing and troubleshooting, to reporting results to the customer. All told, DTX can save you considerable time and money – up to four hours a day.

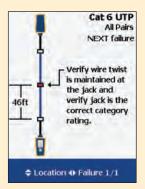
### Cat 6 certification in 9 seconds

The DTX-1200 and DTX-1800 perform Cat 6 certification tests in just 9 seconds – in full compliance with industry standards and with superior accuracy. That's *several times faster* than existing testers. This incredible speed means you can test up to 170 more links in an eight-hour shift.

### Troubleshoot faults twice as fast

When a link fails, the DTX Series provides quick, easy-to-understand directions to identify the point of failure (distance from the tester) and the possible reason(s) for the failure.

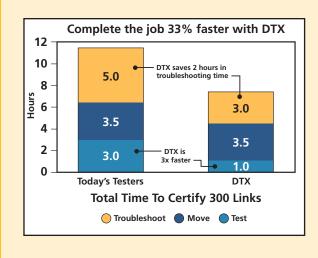
These directions not only tell you the problem, but also *identify corrective actions* your test technicians can take to solve the problem quickly – all without having to consult the project manager. Instead of spending time executing trial and error corrections – and re-testing to find out



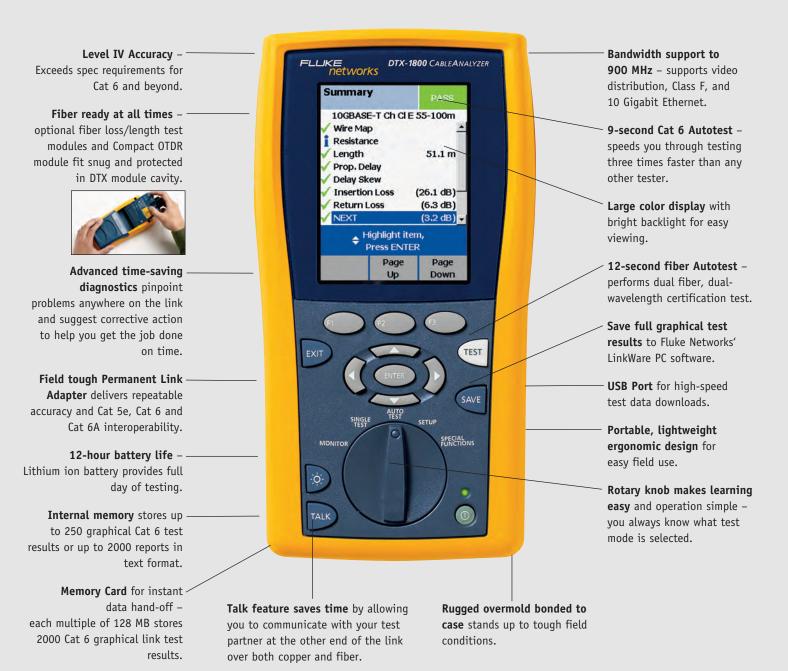
whether the problem has been resolved – the technician knows exactly where to look and what to do to fix the failing link. Even if only two percent of the cables certified in one shift fail Autotest, you'll save as much as two hours of labor time per day of certifying.

# Fast even when you're not testing

The DTX Series isn't just a faster way to test. It cuts setup and reporting times. Its ease-of-use lowers training time. Extended battery life means you can do more on a single charge. And a bright color display, ample memory, and built-in talk set all contribute to overall productivity while enhancing the user experience. This all adds up to save you time and money every day.



# The DTX CableAnalyzer: a visionary approach to testing.



### Enhance the power of DTX.

#### Test and certify 10 Gig Ethernet over copper

The DTX 10 Gig over Copper Test Solution enables testing and certification of twisted pair cabling for 10 Gigabit Ethernet deployments – whether it is a Cat 6 or Augmented Cat 6 cabling system. The DTX-10GKIT, together with DTX-1800 CableAnalyzer, is the first field test solution that measures performance for 10 Gig and Alien Crosstalk (ANEXT and AFEXT) in full compliance with the industry standards to 500 MHz.

#### Test and certify 10 Meg to 10 Gig Ethernet over fiber

With optional on-board fiber modules and the DTX Compact OTDR, complete fiber certification is ready whenever you need it. Our certification solution includes loss length, polarity measurements and fiber traces. You can validate fiber link performance and installation quality as well as locate sources of loss and reflectance. Measure optical loss at multiple wavelengths without swapping near and far-end units. Perform a single-end OTDR test to identify latent problems in a fiber link. The only cable tester that lets you switch between copper and fiber with the touch of a button or perform a comprehensive suite of tests from one platform.

#### Verify network service availability

Improve the services you offer your customers with the DTX CableAnalyzer and Network Service Module (DTX-NSM). Simply plug the DTX-NSM module into the back of the main unit and you're ready to verify network service availability and link connectivity up to 1 Gigabit Ethernet. Verify if a link is active, identify its data rate, duplex capabilities and whether power is available for PoE. Then document all the network connectivity tests executed as an integrated part of the cable certification documentation provided by LinkWare.

#### Test cabling with Midspan PSEs for POE applications

Midspan power sources block DC power from traveling to the Ethernet switch or other active equipment in the wiring closet. This prohibits Wiremap tests of the link with conventional DC test methods. The DTX Series CableAnalyzer has the capability to test cabling using AC signals. This unique feature allows full certification to ISO and TIA standards where Midspan Power over Ethernet supplies are used.

#### Certify patch cord performance

Test patch cords to ensure optimal network performance with greater channel throughput and greater system margin. Attach the optional DTX Patch Cord Adapters (DTX-PCU6S) to the DTX main and remote units and you're ready to certify patch cord performance to TIA Cat 6/5e specifications and also ISO class D/E.

#### Test coaxial cable quickly and easily

Extend the capabilities of your DTX CableAnalyzer to test coaxial cabling systems including legacy data cabling (such as 10BASE-2 or 10BASE-5 Ethernet) and video distribution coaxial cabling. Test coax cable length, propagation delay, cable (input) impedance and insertion loss as a function of signal frequency.













DTX-1800 with DTX 10 Gig Kit to test Alien Crosstalk performance



### Get more done in less time with fiber on-board.

#### **Record-fast fiber certification**

The DTX fiber modules accelerate testing through exclusive technology and an easy-to-use interface. Press the Autotest button and you get standards compliant certification automatically – test two fibers, each at two wavelengths, measure length, and determine the pass or fail status – all in about 12 seconds. Our fiber modules let you test more fibers in less time, cutting testing costs and freeing you up for other tasks. You can easily save more than 100 hours per year.

# Test copper and fiber with a touch of a button

Only the DTX platform offers optional on-board fiber modules – so you'll never lose time searching for your fiber adapter. And fiber certification is always ready when you are. No other solution lets you switch between copper and fiber with a touch of a button.

### **Deliver Basic Tier 1 fiber certification**

Our comprehensive Tier 1 certification solution includes loss, length, and polarity measurements for singlemode and multimode fiber. You can validate fiber link performance and installation quality. Measure optical loss at multiple wavelengths. Measure fiber length and verify polarity. And bi-directionally test fibers at two wavelengths without swapping near and far-end units.

### **Deliver Extended Tier 2 fiber certification**

The DTX Compact OTDR shoots traces to measure the loss and reflectivity of connectors, splices and other events on multimode and singlemode fiber links. With it, you can ensure high quality workmanship of fiber installations.

#### Find faults faster

The optional DTX Compact OTDR module identifies breaks in the fiber link, connections or splices with excessive loss. The fiber loss/length modules as well as the Compact OTDR module offer an integrated visual fault locator (VFL) – a tool that makes troubleshooting simple link problems fast and incredibly easy. The bright laser-driven VFL helps you locate many near-end fiber faults and can be used to verify continuity and polarity. Our exclusive integrated design ensures that the VFL is always on-hand when you need it.





### DTX copper/fiber kits available

If you certify twisted pair copper and fiber optic cabling, we have a kit for you. These kits bundle a DTX CableAnalyzer with DTX Fiber Modules and/or a DTX Compact OTDR so you have all you need to certify both copper and fiber media.

#### **DTX Copper/Fiber kits**

	DTX-1200 -M	DTX-1200-MS	DTX-1800-M	DTX-1800-MS	DTX-1800-MS0
DTX-1200	•	•			
DTX-1800			•	•	•
DTX-MFM2	•	•	•	•	•
DTX-SFM2		•		•	•
DTX-OTDR					•





### Time is money. DTX saves you both.

The DTX CableAnalyzer Series delivers superior performance that can reduce your total certification costs by as much as 33% per year. This dramatic reduction is the result of not just faster testing, but also improved accuracy, superior diagnostics, longer battery life, simple user interface, and fast setup and reporting. **DTX – it's all about time.** 

#### **DTX CableAnalyzer Series**

Product Features	DTX-1800	DTX-1200
Cat 6 Autotest time (seconds)	9	9
Maximum bandwidth (MHz)	900	350
Accuracy level	IV	IV
Color display	•	•
Stores graphical results data	•	•
Internal memory capacity (graphical Cat 6)	250	250
Removable memory card interface	•	•
Cat 6 graphical results for each of 32 MB multiple	600	600
Lithium ion batteries – battery life	12 hours	12 hours
Advanced diagnostics	•	•
AC Wire Map capability	•	•
USB interface	•	•
Serial interface	•	•
Cat 6A permanent link adapter	•	•
Cat 6 channel adapter	•	•
Accepts resident fiber module	•	•
Start autotest at smart remote	•	•
Talk between main and smart remote	•	•
Standard Accessories		
DTX Compact OTDR Module	option	option
Fiber Loss/Length Test Module (multimode, singlemode,		
or gigabit multimode)	option	option
Fiber Compact OTDR Module	option	option
DTX 10 Gig Kit	option	n/a
Network Service Module	option	option
Patch Cord Test Adapters	option	option
Class F Adapters	option	n/a
Coax Cable Test Adapters	option	option
Multimedia memory card	•	option
USB cable	•	•
Serial computer interface cable	•	option
Talk headset	•	•
Carrying case	•	•

Note:

- Feature or accessory is available in the standard product configuration.
- n/a The feature is not available; the accessory is not applicable.
- option The accessory can be purchased as an optional item.

The DTX Series gives you a clear and simple upgrade path from any of the models to any higher performance model, including the DTX-1800.

#### Enhance your DTX tester with service, support, and training.

Register your DTX and receive a bonus gift. Plus access to our Technical Assistance Center (TAC) and extensive on-line Knowledge Base for fast answers. Register today at www.flukenetworks.com/register

Customer Support is easy with our NetworkSuperVision™ Gold Support. It ensures peace-of-mind with free annual calibration, free loaner units, 24/7 TAC support and special discounts on training and promotions. See www.flukenetworks.com/goldsupport for more information. Or contact your country sales organization for Gold program availability and pricing.

Train your installers at our one-day CCTT training and certification program. This BICSI-accredited course includes classroom training, hands-on labs, and exam certification exercises. Visit www.flukenteworks.com/CCTT for more information. Or contact the country sales organization nearest you for availability.



#### **Experience the power of DTX.**

We invite you to experience the unique capabilities of our DTX CableAnalyzer by taking a virtual test drive at www.flukenetworks.com/DTXlive.

Or in the U.S. and Canada, call us at 1-800-508-0490 and let a Fluke Networks
Systems Engineer show you how DTX technology can work for you. Other countries, visit
www.flukenetworks.com/contact for a sales
organization near you. You can also sign up for a free half-day workshop covering the latest in testing and standards overview, DTX product demonstration, and hands-on operation.
To find a workshop in your area, go to
www.flukenetworks.com/workshops.

The DTX Series from Fluke Networks. The revolutionary platform that significantly reduces total time to certify – today and tomorrow.

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

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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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## **DTX CableAnalyzer™ Ordering Information**

Model Name	Product Description
DTX-1800¹	DTX-1800 CableAnalyzer – Includes DTX-1800 Main and Smart Remote, LinkWare PC Software, 16MB MMC Card, Cat 6/Class E
	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-1200¹	DTX-1200 CableAnalyzer – Includes DTX-1200 Main and Smart Remote, LinkWare PC Software, Cat 6/Class E 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>	DTX-LT CableAnalyzer – Includes DTX-LT Main and Smart Remote, LinkWare PC Software, Cat 6/Class E Permanent Link Adapters
	(2), Cat 6/Class E Channel Adapter (1), AC Chargers (2), Carrying Case, USB Interface Cable (Mini-B), User Manual
DTX-MFM	DTX Multimode Fiber Modules – 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	DTX Singlemode Fiber Modules – 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	DTX-1800 with Multimode Fiber Modules – Includes DTX-1800 CableAnalyzer and a set of DTX-MFM Multimode Fiber Modules
DTX-1800-MS	DTX-1800 with Multimode and Singlemode Fiber Modules – Includes DTX-1800 CableAnalyzer and set of DTX-MFM Multimode
	Fiber Modules and DTX-SFM Singlemode Fiber Modules
DTX-1200-M	DTX-1200 with Multimode Fiber Modules – Includes DTX-1200 CableAnalyzer with set of DTX-MFM Multimode Fiber Modules
DTX-1200-MS	DTX-1200 with Multimode and Singlemode Fiber Modules – Includes DTX-1200 CableAnalyzer and set of DTX-MFM Multimode
	Fiber Modules and DTX-SFM Singlemode Fiber Modules
DTX-1800/SR	DTX-1800 Smart Remote Add-on
DTX-1200/SR	DTX-1200 Smart Remote Add-on
DTX-LT/SR	DTX-LT Smart Remote Add-on

#### **Accessories and Options**

Model Name	Product Description	
DTX-CHA001	Cat 6/Class E Channel Adapter	
DTX-CHA001S	Cat 6/Class E Channel Adapters, set of 2	
DTX-PLA001	Universal Permanent Link Adapter (1)	
DTX-PLA001S	Universal Permanent Link Adapters (2) with DSP-PM06	
DSP-PM06	Cat 6 Centered Personality Module, set of 2	
DSP-PMxx	Personality Modules for IDC and Legacy Cabling Systems A wide variety of modules are available for IDC-type connectors	
	and legacy systems	
DTX-CHA011	Siemon Tera Channel Adapter (available Q3 2004)	
DTX-PLA011	Siemon Tera Permanent Link Adapter (available Q3 2004)	
DTX-TERA	Siemon Tera Adapter Kit (available Q3 2004) – Includes Tera Channel Adapters (2) and Tera Permanent Link Adapters (2)	
DTX-CHA012	Nexans GG45 Channel Adapter (available Q4 2004)	
DTX-PLA012	Nexans GG45 Permanent Link Adapter (available Q4 2004)	
DTX-GG45	Nexans GG45 Adapter Kit (available Q4 2004) – Includes GG45 Channel Adapters (2) and GG45 Permanent Link Adapters (2)	
DTX-LION	Lithium Ion Battery Pack	
DTX-SER	Serial RS-232 Cable (IEEE 1394 to DB-9)	
DSP-MCR-U	MultiMedia Card (MMC) Reader, USB	
LinkWare	LinkWare Cable Test Management Software – Free download at www.flukenetworks.com/linkware	
LinkWare-Stats	LinkWare Stats Statistical Report Option – Results analysis software option for LinkWare	
DTX-1218E	DTX-1200 Enhancement Kit: Upgrade DTX-1200 to DTX-1800	
DTX-LT18E	DTX-LT Enhancement Kit: Upgrade DTX-LT to DTX-1800	
DTX-LT12E	DTX-LT Enhancement Kit: Upgrade DTX-LT to DTX-1200	

#### **Support Options**

Model Name	Product Description	
GLD-DTX	DTX Gold Support – Includes no charge repair, Loaner kit, no charge scheduled annual calibration or performance verification,	
	no charge replacement of accessories², 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	DTX Fiber Module Gold Support – As above	

<sup>&</sup>lt;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			
Shielded and unshielded twisted pair LAN cabling:	TIA Category 3, 4, 5, 5e, and 6: 100 $\Omega$		
(STP, FTP, SSTP, and UTP)	ISO/IEC Class C and D: 100 $\Omega$ and 120 $\Omega$		
Note: For availability of additional adapters that allow testing to other performance	ISO/IEC Class E, 100 $\Omega$		
standards, different cabling types, or fiber optic cabling, contact Fluke Networks.	ISO/IEC Class F, 100 $\Omega$		
Standard Link Interface Adapters			
Cat 6/Class E permanent link adapters	Plug type: shielded Cat 6 centered 8-pin modular plug (RJ45)		
	Plug life: > 5000 insertions		
	Tests supported: shielded and unshielded cable, TIA Cat 3, 4, 5, 5e, and 6 and ISO/IEC Class C, D		
	and E permanent link		
Cat 6/Class E channel adapters	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, and 6 and ISO/IEC Class C, D		
	and E channels		
Test Standards			
TIA	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)		
ISO/IEC	11801 Class C, D and E		
	11801-2000 Class C, D and E		
	11801 Class F (DTX-1800 only)		
EN	50173 Class C, D ,E		
	50173 Class F ( DTX-1800 only)		
ANSI	TP-PMD		
IEEE 802.3	10BASE-T, 100BASE-TX, 1000BASE-T		
IEEE 802.5	(STP cabling, IBM Type 1, 150 $\Omega$ ) Token Ring, 4 Mbps and 16 Mbps		
General Specifications			
Speed of Autotest	Full 2-way Autotest of Category 6 Twisted-Pair links: 12 seconds or less		
	Full 2-way Autotest of ISO/IEC Class F links: 30 seconds		
Supported test parameters	Wire Map, Length, Propagation Delay, Delay Skew, DC Loop Resistance, Insertion Loss (Attenuation),		
The selected test standard determines the test parameters and the frequency range of the tests	Return Loss (RL), RL @ Remote, NEXT, NEXT @ Remote, Attenuation-to-Crosstalk Ratio (ACR),		
and the frequency range of the tests	ACR @ Remote, ELFEXT, ELFEXT @ Remote, Power Sum ELFEXT, PSELFEXT @ Remote, Power Sum		
California annountair	NEXT, PSNEXT @ Remote, Power Sum ACR, PSACR @ Remote		
Cable tone generator			
Dienlau	Generates tones that can be detected by a tone probe such as a Fluke Networks IntelliTone™ probe.		
Display	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz		
	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz 3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD		
Input protection	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.		
Input protection	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN		
	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz 3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage		
Case	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold		
Case Dimensions	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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		
Case Dimensions Weight	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold		
Case Dimensions Weight Power	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)		
Case Dimensions Weight Power Main unit and remote:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh		
Case Dimensions Weight Power Main unit and remote: Typical battery life:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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  2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours		
Case Dimensions Weight Power Main unit and remote: Typical battery life: Charge time* (with tester off):	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)		
Case Dimensions Weight Power  Main unit and remote: Typical battery life: Charge time* (with tester off): AC adapter/charger, USA version:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)  Linear power supply; Input 108 V ac to 132 V ac, 60 Hz; Output 15 V dc, 1.2 A		
Case Dimensions Weight Power Main unit and remote: Typical battery life: Charge time* (with tester off):	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)  Linear power supply; Input 108 V ac to 132 V ac, 60 Hz; Output 15 V dc, 1.2 A  Switching power supply; Input 90 V ac to 264 V ac, 47 to 63 Hz; Output 15 V dc, 1.2 A		
Case Dimensions Weight Power  Main unit and remote: Typical battery life: Charge time* (with tester off): AC adapter/charger, USA version: AC adapter/charger, international version:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)  Linear power supply; Input 108 V ac to 132 V ac, 60 Hz; Output 15 V dc, 1.2 A  Switching power supply; Input 90 V ac to 264 V ac, 47 to 63 Hz; Output 15 V dc, 1.2 A (isolated output)		
Case Dimensions Weight Power  Main unit and remote: Typical battery life: Charge time* (with tester off): AC adapter/charger, USA version: AC adapter/charger, international version: Memory backup power in main unit:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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 2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)  Linear power supply; Input 108 V ac to 132 V ac, 60 Hz; Output 15 V dc, 1.2 A  Switching power supply; Input 90 V ac to 264 V ac, 47 to 63 Hz; Output 15 V dc, 1.2 A		
Case Dimensions Weight Power  Main unit and remote: Typical battery life: Charge time* (with tester off): AC adapter/charger, USA version: AC adapter/charger, international version:	The tones are generated on all pairs. Frequency range of tones: 440 Hz to 831 Hz  3.7 in (9.4 cm) diagonal, 240 dots wide by 320 dots high, passive color, transmissive LCD with backlight.  Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage  High impact plastic with shock absorbing overmold  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  2.4 lb (1.1 kg), nominal (without adapter or module)  Lithium-ion battery pack, 7.4 V, 4000 mAh  12 to 14 hours  4 hours (below 40° C)  Linear power supply; Input 108 V ac to 132 V ac, 60 Hz; Output 15 V dc, 1.2 A  Switching power supply; Input 90 V ac to 264 V ac, 47 to 63 Hz; Output 15 V dc, 1.2 A  (isolated output)  Lithium battery		

<sup>\*</sup> 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	32° F to 95° F (0° C to 35° C): 0 % to 90 %		
(% RH without condensation)	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 adapt	er 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 frequen	cy range supported by the tester.	
Category 6/Class E link test modes	DTX CableAnalyzer far exceeds Level III requirements of TIA/EIA-568-B.2-2 and IEC 61935-1.		
(and lower link categories)			
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	800 m (2600 ft)	150 m (490 ft)	
Resolution	0.1 m or 1 ft	0.1 m or 1 ft	
Accuracy	± (.3 m + 2%); for lengths 0 to 150 m	± (.3 m + 2%)	
	± (.3 m + 4%); for lengths 151 to 800 m		
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 + 2%)	
	± (2 ns + 4%); 751 to 4000 ns		
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.		

#### Distributed by:

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

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

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