

Solutions Catalog

60998

222

æ.

TABLE OF CONTENTS

Datacom Cabling

Copper Cable Test Solutions

••
Copper Cable Test Solutions Product Comparison5
DTX CableAnalyzer [™] Series
DTX Accessories and Gold Support7
DTX 10 Gig over Copper Test Solutions8
DTX CableAnalyzer Fiber Options
CableIQ [™] Qualification Tester
MicroMapper [*]
MicroScanner ² Cable Verifier10
LinkWare™ Cable Test Management Software11
Linkware [™] Stats11
IntelliTone [™] Pro Toner and Probe
Pro3000 [™] Analog Toner and Probe12
Pocket Toner [®]
TS [•] 100 Pro Cable Fault Finder14
TS [•] 90/TS [•] 100 Cable Fault Finder14

Fiber Testing, Troubleshooting and Certification

Fiber Testing, Troubleshooting and Certification
Comparison
Fiber Plant Charecterization & Troubleshooting
(Tier 2 Certification)
OptiFiber [®] Pro OTDR
OptiFiber Pro OTDR Modules/Accessories 19
DTX Compact OTDR20
Loss/Length (Tier 1) Fiber Certification
DTX-CLT CertiFiber® Optical Loss Set
DTX Fiber Modules21
SimpliFiber™ Pro Optical Power Meter
Fiber Test Kits22
Test-Reference Cords, Adapters and Mandrels 24
Fiber QuickMap [®] 25
Fiber OneShot [®] Pro25
Fiber Inspection and Cleaning
FiberInspector™ Pro Video Microscope26
FiberInspector™ Mini Video Microscope 26
FiberViewer™ Fiber Microscope26
FiberInspector Adapters
VisiFault™ Visual Fault Locator
Fiber Optic Cleaning Kits
Tools and Test Kits
JackRapid [™] Termination Tool
Impact Tools
Blades

Impact Tools
Blades
Pro-Tool Kits
Electrical Contractor Telecom Kits32
Modular Crimpers
Cable Splicing Knife33
D-Snips™
Electrician's Snips

Cable Strippers	34
Need-L-Lock™ Crimping Pliers	34
Probe Pic	34
Can Wrench	34

IT Networking

Test and Troubleshoo	t
----------------------	---

Telecommunications Providers

······································
Telephone Test Set Comparison49
TS®52 PRO LCD Test Set
TS®40 Series Test Sets
TS®30 Test Set
TS®22 Series Test Sets
TS®25D LCD Test Set
TS®19 Test Set53
Modular Adapters53
Line Cords and Clips54

Access Network Test Equipment

Fiber OneShot™ Optical Test Set	56
MetroScope [™] Service Provider Assistant	57
LinkRunner™ Duo CE Pocket Carrier Ethernet	
Test Set	58
CopperPro [™] Series II Broadband Loop Tester	59
990DSL CopperPro™Loop Tester	60
CopperPro Terminator™ Far End	
Terminating Device	60
635 QuickBERT-T1 Test Set	61
Voltage Detector	61

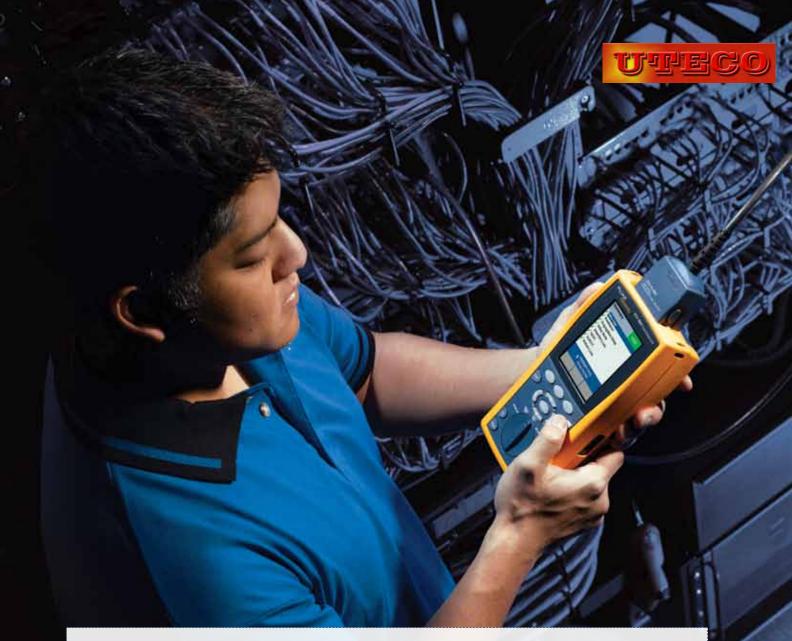
Corporate

Fluke Networks Gol	Support	63
--------------------	---------	----



Copper Cable Test Solutions
Copper Cable Test Solutions Product Comparison5
DTX CableAnalyzer [™] Series
DTX Accessories and Gold Support
DTX 10 Gig over Copper Test Solutions
DTX CableAnalyzer Fiber Options
MicroMapper [*]
MicroScanner ² Cable Verifier
LinkWare [™] Cable Test Management Software
Linkware™ Stats
IntelliTone [™] Pro Toner and Probe
Pro3000 [™] Analog Toner and Probe
Pocket Toner [®]
TS®100 Pro Cable Fault Finder14
TS [®] 90/TS [®] 100 Cable Fault Finder14
Fiber Testing, Troubleshooting and Certification
Fiber Testing, Troubleshooting and Certification Comparison 16
Fiber Plant Charecterization & Troubleshooting
(Tier 2 Certification)
OptiFiber Pro OTDR
OptiFiber Pro OTDR Modules/Accessories
DTX Compact OTDR
Loss/Length (Tier 1) Fiber Certification
DTX-CLT CertiFiber Optical Loss Set
DTX Fiber Modules
SimpliFiber™ Pro Optical Power Meter
Fiber Test Kits
Test-Reference Cords, Adapters and Mandrels
Fiber QuickMap* 25 Fiber QuackAp* 25
Fiber OneShot [®] Pro
FiberInspector™ Pro Video Microscope
FiberInspector™ Mini Video Microscope
FiberViewer™ Fiber Microscope
FiberInspector Adapters
VisiFault [™] Visual Fault Locator
Fiber Optic Cleaning Kits
Tools and Test Kits
JackRapid [™] Termination Tool
Impact Tools
Blades
Pro-Tool Kits
Electrical Contractor Telecom Kits
Modular Crimpers
Cable Splicing Knife
D-Snips™
Electrician's Snips
Cable Strippers
Need-L-Lock™ Crimping Pliers
Probe Pic

www.electrolux.mk www.uteco.mk



COPPER CABLE TEST SOLUTIONS

Complete solutions for the installation, testing, documentation and certification of copper premises cabling

Fluke Networks' copper verification, qualification and certification products are essential tools for installers, contractors and network technicians in today's environment. As networks grow and change, the performance of cabling is critical to delivering services to users. New testing standards also emerge and with them come guidelines that cabling professionals must follow when installing, testing, troubleshooting, and certifying copper. Whether it is coax, 10BASE-T, 100BASE-TX, 1000BASE-T or 10GBASE-T, you need to be aware of the requirements and avoid the potential pitfalls in the copper infrastructure.

Fluke Networks' copper testing products reduce network downtime caused by flaws in the cabling or installation process. They also resolve problems in operating networks and make upgrades simpler. Intuitive user interfaces are easy to learn and understand. With precise and repeatable accuracy that have become gold standard in network testing, network professionals save time and money using Fluke Networks' copper testing products.







	DTX CableAnalyzer [™] Series	CablelQ Qualification Tester	MicroScanner ² Cable Verifier
Supports structured cabling warranties	√		
Meets TIA/ISO certification standards requirements	Levels IIe, III, IIIe and Level IV		
Provides pass/fail results	9-second Cat 6		
Documents test results	\checkmark	\checkmark	
Qualifies cabling speed (10/100/VoIP/Gig)		\checkmark	
Advanced troubleshooting: HDTDX, HDTDR, AxTalk	\checkmark		
Troubleshoots distance to connection fault	\checkmark	\checkmark	
Basic troubleshooting: distance to break or short	\checkmark	\checkmark	\checkmark
Continuity and wiremap	\checkmark	\checkmark	\checkmark





Analyzer[™] Series

The DTX CableAnalyzer Series is the industry's most trusted cable testing platform. It significantly reduces total time to certify cabling to TIA-568-C and ISO 11801:2002,2010 Amd.2. by improving every aspect of the testing process. The DTX CableAnalyzer is the only tester to use a standards-compliant, electrically-centered permanent link test adapter and measure 10 Gig Alien Crosstalk (ANEXT & AFEXT) in full compliance with industry standards. It also stands alone in its ability to diagnose complex cabling problems with High Definition Time Domain Crosstalk (HDTDX) and High Definition Time Domain Reflectometry (HDTDR).

- The most used and trusted tester- over 1.5 billion copper links certified to date
- Significantly reduces total certification costs up to 33% a year
- Independently verified to exceed all relevant accuracy standards
- Analyze test results and create professional test reports using LinkWare[™] reporting software
- Endorsed by over 20 cable companies worldwide
- Perform basic fiber loss certification 5x faster with DTX Fiber Modules
- Perform extended OTDR fiber certification

Model	Description	Gold 1YR	Gold 3YR
DTX-1800	Ultimate performance in a future-proof investment – test capabilities to 900 MHz, and industry-leading Autotest execution times – 9-seconds for a Cat 6 link	GLD-DTX	GLD-DTX- 3YEAR
DTX-1200	Revolutionized performance and value for Cat 6/5e certification – test capabilities up to 350 MHz, and industry-leading Cat 6 Autotest in 9 seconds	GLD-DTX	GLD-DTX- 3YEAR
DTX-LT	Excellent performance in an entry-level model – test capabilities up to 350 MHz, and impressive Cat 6 Autotest in 30 seconds*	GLD-DTX	GLD-DTX- 3YEAR
DTX-1800-MS0	DTX 1800 Copper/Fiber/OTDR Kit includes unit, sets of Multimode DTX MFM2 and Singlemode DTX SFM2 Fiber (loss/length) Modules, DTX Compact OTDR Module, launch fibers, accessories and carrying case(s)	GLD-DTX- MSO	GLD-DTX-MSO- 3YR
DTX-1800-M0	DTX-1800 with Multimode Fiber Modules and OTDR includes unit set of Multimode DTX MFM2 Fiber Modules and a DTX Compact OTDR Module	GLD-DTX-MO	GLD-DTX-MO- 3YR
DTX-1800-MS	DTX-1800 with Multimode and Singlemode Fiber Module includes unit and set of DTX-MFM2 Multimode Fiber Modules and DTX-SFM2 Singlemode Fiber Modules	GLD-DTX-MS	GLD-DTX-MS- 3YR
DTX-1800-M	DTX-1800 with Multimode Fiber Modules – includes unit and a set of DTX-MFM2 Multimode Fiber Modules	GLD-DTX-M	GLD3-DTX-M
DTX-AXKIT	Alien Crosstalk Communication Modules (set of two) and AxTalk Analyzer [™] software	GLD-DTX-KIT	N/A
DTX-OTDR-QMOD	DTX Compact OTDR Module – includes 850/1300/1310/1550 OTDR Module and carrying case	GLD-DTX- OTDR	GLD-DTX- OTDR-3YR
DTX-MFM2	DTX Multimode Fiber Modules – includes two modules (one for main and one for Smart Remote), 850 nm and 1300 nm LED sources combined into single output port, 850/1300/1310/1550 nm power meter, and integrated VFL	GLD-DTX- FIBERMOD	GLD-DTXFMOD- 3YEAR
DTX-SFM2	DTX Singlemode Fiber Modules – includes a set of two modules for main and Smart Remote, 1310 nm and 1550 nm laser sources combined into single output port, 850/1300/1310/1550 nm power meter and integrated VFL	GLD-DTX- FIBERMOD	GLD-DTXFMOD- 3YEAR
DTX-NSM	DTX Network Service Module – includes one module to verify connectivity, network service and PoE	N/A	N/A
DTX-1800SR	DTX-1800 Smart Remote add-on	N/A	N/A
DTX-1200SR	DTX-1200 Smart Remote add-on	N/A	N/A
DTX-LT/SR	DTX-LT Smart Remote add-on*	N/A	N/A

See page 23 for the DTX CableAnalyzer fiber options.

* Not available in all geographies; contact your local Fluke Networks office for information.

DTX CableAnalyzer Accessories

Model	Description	
DTX-COAX	DTX Coax Cable Test Adapter (2 adapters included)	
DTX-PLA001S	Permanent Link Adapters (2) with PM06 Personality Modules. Also interfaces with a number of personality modules (DSP-PMxx) to test links with IDC termination	
DTX-PLA001	Permanent Link Adapter for use with the DTX Series CableAnalyzer	
DTX-PLA002	Permanent Link Adapter for Cat 6A and Alien Cross Talk testing	
DTX-CHA002S	Set of two (2) Cat 6A/Class Ea Channel Adapters optimized for Alien Crosstalk measurements	
DTX-PLCAL	Permanent Link Adapter Field Calibration module	
DTX-PLA002PRP	Plug replacement parts for the DTX-PLA002	
DTX-TERA	TERA Adapter Kit – includes TERA Channel Adapters (2) and TERA Permanent Link Adapters (2) to test Siemon TERA class F systems	
DTX-PLA011	TERA Permanent Link Adapter for Siemon TERA Class F Systems	
DTX-CHA011	TERA Channel Adapter for Siemon TERA Class F Systems	
DTX-CHA002	Cat 6A/Class Ea Channel Adapter optimized for Alien Crosstalk measurements.	
DTX-CHA021S	M12 4 position adapter (set of 2)	
DTX-ACUN	AC charger, universal	
DTX-ACNA	AC charger, North America	
DTX-CASE	Standard carrying case – DTX Series	
DTX-STRP	DTX carrying strap	
DTX-HCSE	Carrying case - Hard	
DTX-USB	USB interface cable (mini-B)	
DTX-SER	Serial RS-232 cable (DB-9 to IEEE 1394)	
DTX-LION	Lithium-ion battery pack	
DTX-PC5ES DTX	Patch Cord Test Adapter Set for Category 5e patch cords. Certifies both shielded and unshielded category 5e patch cords per ANSI/TIA 568-C and ISO 11801:2010	
DTX-PC6S DTX	Patch Cord Test Adapter Set for Category 6 patch cords. Certifies both shielded and unshielded category 6 patch cords per ANSI/TIA 568-C and ISO 11801:2010	
DTX-PC6AS DTX	Patch Cord Test Adapter Set for Category 6A patch cords. Certifies both shielded and unshielded category 6A patch cords per ISO 11801:2010	
DTX-PCTAC5EKS	Twin pack of shielded Cat 5e jacks. Recommended replacement for DTX-PC5ES Patch Cord Test adapters	
DTX-PCTAC6KS	Twin pack of shielded Cat 6 jacks. Recommended replacement for DTX-PC6S Patch Cord Test adapters	
DTX-PCTAC6AKS	Twin pack of shielded Cat 6A jacks. Recommended replacement for DTX-PC6AS Patch Cord Test adapters	



DTX 10 Gig over Copper Test Solution

The DTX-1800 is the only cable tester capable of standards-compliant field testing to guarantee a cabling plant will support 10GBASE-T.

- Certifies the fastest growing enterprise cabling for new installations Category 6A.
- Quickly and easily measures Alien Crosstalk (ANEXT and AFEXT) in full compliance with industry standards
- Enables deep analysis and troubleshooting of AxTalk performance problems

Model	Description	Gold 1YR
DTX-10GKIT	DTX-1800 Alien Crosstalk Analyzer Kit includes the DTX-AXTLK1 communication modules and the Windows-based AxTalk Analyzer™ Software, DTX-PLA002S, DTXCHA001AS and DTX-AXTERM terminator, quantity two	GLD-DTX-KIT
DTX-AXKIT	Alien Crosstalk Communication Modules (set of two) and AxTalk Analyzer™ software	GLD-DTX-KIT
DTX-PLA002S	Cat 6A/Class EA Permanent Link Adapter – set of two	N/A
DTX-CHA002S	Set of two Cat 6A/Class EA Channel Adapters for Alien Crosstalk measurements	N/A
DTX-AXTERM	Alien Crosstalk Link Terminators	N/A
DTX-CHA002	Cat 6A Class EA Channel Adapter (for Alien Cross Talk testing)	N/A



DTX CableAnalyzer Fiber Options

The DTX CableAnalyzer is a test platform that functions as an Optical Loss Test Set (OLTS) and/or an Optical Time Domain Reflectometer (OTDR).

Loss/length (Tier 1) fiber certification is performed by adding the DTX Fiber Modules. This certification test compares absolute and length measurements to industry standards for the application that will run over the cabling.



OTDR testing provides a graphical signature (trace) of the fiber's attenuation along its length and can be completed with the DTX Compact OTDR Module. OTDR testing can complement loss/length testing with an extended or Tier 2 certification. Extended fiber certification characterizes individual connectors and splices and ensures the workmanship and quality of the installation meet design and warranty specifications. For more information about fiber options, see page 21.

Model	Description	Gold 1YR	Gold 3YR
DTX-OTDR-QMOD	DTX Compact OTDR Module – includes 850/1300/1310/1550 OTDR Module and carrying case	GLD-DTX- OTDR	GLD-DTX-OTDR- 3YR
DTX-MFM2	DTX Multimode Fiber Modules – includes two modules (one for main and one for Smart Remote), 850 nm and 1300 nm LED sources combined into single output port, 850/1300/1310/1550 nm power meter, and integrated VFL	GLD-DTX- FIBERMOD	GLD-DTXFMOD- 3YEAR
DTX-SFM2	DTX Singlemode Fiber Modules – includes a set of two modules for main and Smart Remote, 1310 nm and 1550 nm laser sources combined into single output port, 850/1300/1310/1550 nm power meter and integrated VFL	GLD-DTX- FIBERMOD	GLD-DTXFMOD- 3YEAR



CableIQ[™] Qualification Tester

CableIQ is the first qualification tool designed for network technicians who need to troubleshoot connectivity problems and qualify cabling bandwidth. It detects speed and duplex settings of attached switches and PCs. Intelligent wiremap graphically shows distance to faults (e.g., pin 1 break at 37 ft). Lightweight, rugged, reliable unit tests all copper cabling. Its ease and power helps you close trouble tickets faster and ensure smooth upgrades to higher network speeds.

- Sees if your existing cabling can support voice, VoIP, 10/100/Gigabit Ethernet
- Troubleshoots why existing cabling plant can't support the desired network bandwidth
- Discover what's at the end of any cable and displays device configuration (speed/duplex/pairing)
- Frees up switch ports and identifies unused links
- Graphically maps wiring configuration and shows distance to faults
- Locates and traces cable with IntelliTone™ digital signaling technology

CableIQ Service Kit combines powerful cable and network testing to qualify cabling bandwidth and confirm network connectivity. Expedites problem resolution and facilitates moves, adds, changes, and upgrades.

CableIQ Gigabit Service Kit combines powerful Gigabit cable and network testing. Expedites problem resolution and facilitates moves, adds, changes, and upgrades. Documents cabling bandwidth and network link speed.

CableIQ Advanced IT Kit



CableIQ Gigabit Service Kit





MicroMapper[™]

Simple verification tester verifies wiremap and identifies faults with LEDs.

- Testing of twisted pair cables for open circuits, shorts, crossed pairs, reversed pairs and split pairs
- Easy-to-read fault display
- Tone generator for tracing installed cables hidden in walls, floors and ceilings
- Remote unit enables one-person testing of installed cables

Model	Description
MT-8200-49A	MicroMapper and MicroMapper Remote, patch cable, 6-volt alkaline battery and user guide



MicroScanner² Cable Verifier

Next generation MicroScanner streamlines voice/data/video cable and service testing. The user interface makes testing fast, easy, and crystal clear. Everything cable technicians need to know, including available services (10/100/1000 Ethernet, POTS, PoE voltage), cable length, wire-map, cable ID, and distance to fault all are displayed on one oversized backlit screen. Replace multiple tools by testing all RJ-11, RJ-45, and coax (F) media with no adapters. Built-in IntelliTone⁻ digital and analog toning precisely locates virtually any cable or wire pair – even on active networks. Ergonomic design features sleek rubber over mold to enhance grip and ruggedness. Includes carry case.



- Displays cable length, wiremap, cable ID, and distance to fault on one screen
- Detects today's media services, including 10/100/1000 Ethernet, POTS, and PoE
- Locates virtually any cable or wire pair with IntelliTone digital and analog toning

Model	Description	
MS2-100	MicroScanner ² Cable Verifier	
MS2-KIT	MicroScanner ² Professional Kit – includes MicroScanner ² Cable Verifier, Remote ID #s 2-7, IntelliTone Pro 200 Probe, bare wire adapter, coax cable, two shielded RJ-45 cables, two RJ-11 cables and a deluxe carry case	
MS2-TTK	MicroScanner ² Termination Test Kit – includes MicroScanner ² Cable Verifier, IS60 Pro Tool Kit, IntuliTone Pro 200 Probe, RJ-11 and RJ-45 patch cables, lanyard, owners CD and quick start guide, 9 volt battery and a deluxe carry case	
MS2-IDK27	MicroScanner ² Remote ID Kit #s 2-7	
CLIP-SET	Clip Set - includes RJ-45 to 8-clip test lead	
MT-8200-63A	IntelliTone Pro 200 Probe	





LinkWare[™] Cable Test Management Software

LinkWare gives you the ability to manage test results data from multiple testers with one PC software application. It makes project setup simpler by helping you quickly organize, edit, view, print, save or archive test results by job site, customer, campus or building. You can merge test results into an existing LinkWare database and then sort, search and organize the results by data fields or parameters. And you can count on your data integrity to be secure. LinkWare ensures the data results you upload and store on your computer came from the testers' memory.

- Deliver professional reports in a common format
- Electronically save, maintain and archive test results
- Standards compliant with the ability to configure and print TIA 606-A documentation
- Drag and drop feature makes it easier to manage and organize multiple projects
- Simple user interface and time-saving features for increased productivity
- Included with DTX CableAnalyzer Series, OptiFiber OTDR, DTX-CLT CertiFiber and SimpliFiber™ Pro Optical Power Meter and Fiber Test Kits
- LinkWare[™] Stats option gives a comprehensive view of your entire cable plant's performance

Model	Description
LinkWare	LinkWare Cable Test Management Software – free download at www.flukenetworks.com/linkware



LinkWare[™] Stats

LinkWare Stats is the first software to provide a quick, complete view of your entire cabling plant's performance. It generates statistics on the cabling links within your LinkWare database, transforming performance results into summary graphics that highlight the analytical information you need – fast. Now it's easy to verify margins and spot anomalies.

 Provides a complete, graphical view of cabling plant performance in ways you haven't seen before



- Transforms test data from your LinkWare database into statistics and graphics that highlight the analytical information you need at a glance
- Filters incoming data and highlights (in color) marginal or failed links to eliminate the chance that an anomaly gets overlooked
- Quickly demonstrates that your installation meets warranty requirements
- Creates professional and easily-customized performance summary reports

Model	Description
LinkWare-Stats	Now part of the free LinkWare download





IntelliTone[™] Pro Toner and Probe

Breakthrough digital and analog toning finds cables other toners/probes can't. Advanced sensing modes accurately find the correct cable bundle, and then rapidly isolate the exact cable. Digital signal rejects noise and safely tones active networks. SmartTone™ feature precisely locates individual wire pairs by changing tone when pair is shorted. Verifies end-to-end cable continuity and basic miswires. Identifies

and troubleshoots services with datacom link, two line telecom, continuity and polarity. Powerful talk battery capability tests telecom circuits.

- IntelliTone digital processing eliminates noise and false signals
- SmartTone™ analog toning precisely isolates individual wire pairs
- Locates cables safely and effectively on active networks
- Verifies twisted-pair installation with visual end-to-end continuity test



• Identifies, diagnoses, and troubleshoots datacom/telecom services

Model	Description
MT-8200-60A	IntelliTone Pro 200 Kit – includes IntelliTone Pro 200 Toner and 200 Probe, coax F connector adapter, two RJ-11 and two RJ-45 patch cables and test leads with alligator clips
MT-8200-50A	IntelliTone Pro 100 Kit – includes IntelliTone Pro 100 Toner and 100 Probe, coax F connector adapter, RJ-11 and RJ-45 patch cables and test leads with alligator clips
MT-8200-61A	IntelliTone Pro 200 Toner
MT-8200-51A	IntelliTone Pro 100 Toner
MT-8200-63A	IntelliTone Pro 200 Probe
MT-8200-53A	IntelliTone Pro 100 Probe

Pro3000[™] Analog Toner and Probe

The Pro3000 Toner and Probe kit is your best choice for toning and tracing bare wire on non-active networks. Easily identify individual pairs with its patented SmartTone[®] technology (five different tones for exact pair identification). Angled-bed-of-nails clips allow easy access to individual wires, and the RJ-11 connector is ideal for use on telephone jacks. The probe's powerful speaker allows you to hear through drywall, wood or other enclosures to find wires quickly and easily. You can send tone up to 10 miles on most cables.



- Select solid or alternating tone options, indicated with solid or flashing LEDs
- Exclusive SmartTone technology generates five separate analog tones when the pair is shorted at the far end
- Works on de-energized AC wire, telephone/twisted pair wire, all voice and data category rated cable, all coax cable, speaker wire and security wire

Model	Description
26000900	Pro3000 Analog Tone and Probe Kit
26100900	Pro3000 Probe
26200900	Pro3000 Toner
26100103	Pro3000 Analog Probe replacement tip



Cable Professional

Satellite

•••

Audio & Video

LAN

Voice

Security & Fire

Cable & Telephone

Pocket Toner[®]

The Pocket Toner® connects to any voice, data, or video cable to detect open/short circuits, continuity, AC/DC voltage* and dial tone* all while protecting up to 52 volts. All of the Pocket Toners have dual audible indicators in the main body and detachable buzzer toner units, removable push on connectors, auto shut-off and easy-to-read indicators.

- Low-voltage circuit protection for both • the unit and the detachable toner
- Dual audible indicators in the main body and detachable buzzer toner units
- Auto shut-off

- Easy-to-read indicators; removable push-on connectors
- Male and female adaptable toner section •
- Lightweight, durable anodized aluminum body

•

Model	Description	
PTNX1	Identify and test low-voltage, singular coax cables for continuity, opens/shorts and 50-75 Ω termination. Low-voltage protection up to 52 volts. Kit includes NX1 unit, toner, F-type (M-push, Speed 81 ^{\mathcal{M}}) adapters & 1-AAA battery	
PTNX2	All the features of the NX1 plus AC/DC voltage detection- all in an easy-to-read LCD. Kit includes NX2 unit, toner, F-type (M-push, Speed 81 [™]) adapters & 1-AAA battery	
PTNX2-DLX	All the NX2 features. Kit includes NX2 unit, toner, 66 block adapter, RJ-11 adapter, RJ-45 adapter, Dial Tone Detective™, alligator clips with RJ-45 adapter, F-type (F, 9-M-push, M-71, Speed 81 [™]) adapters, RCA (M, F) adapters, BNC (M, F) adapters, 1-AAA battery & deluxe case with belt clip	
PTNX2-CABLE	All the NX2 features. Kit includes NX2 unit, toner, alligator clips adapter, F-type (F, M-push, M-71, Speed 81™) adapters, 1-AAA battery & small canvas case	
PTNX8	All the features of the NX1 and NX2 plus the ability to test up to 8 cables at once. NX8 unit, toner, F-type (M-push, Speed 81 [™]) adapters, 1-AAA battery & deluxe case with belt clip	
PTNX8-CABLE	All the NX8 features. Kit includes NX8 unit, toner, 8 ID caps, alligator clips, F-type (F, 9-M-push, M-71, Speed 81™) adapters, 1-AAA battery & deluxe case w/ belt clip	
PTNX8-CT	All the NX8 features. Kit includes NX8 unit, toner, 8 ID caps, 66 block adapter, RJ-11 adapter, Dial Tone Detective, [™] alligator clips with RJ-11 adapter, F-type (F, 9-M-push, M-71, Speed 81 [™]) adapters, 1-AAA battery & deluxe case with belt clip	
PTNX8-DLX	All the NX8 features. Kit includes NX8 unit, toner, 8 ID caps, 66 block adapter, RJ-11 adapter, RJ-45 adapter, Dial Tone Detective, [™] alligator clips with RJ-45 adapter, F-type (F, 9-M-push, M-71, Speed 81 [™]) adapters, RCA (M, F) adapters, BNC (M, F) adapters, 1-AAA battery & deluxe case w/ belt clip	
PTNX8-VV-PRO	All the NX8 features. Kit includes NX8 unit, toner, 8 ID caps, 66 block adapter, 8-RJ- 11 adapters, RJ-45 adapter, Dial Tone Detective [™] , alligator clips w/ RJ-11 adapter and RJ-45 adapter, F-type (F, 9-M-push, M-71, Speed 81 [™]) adapters, RCA (M, F) adapters, BNC (M, F) adapters, 1-AAA battery & deluxe case w/ belt clip	
ADAP-PTNX-KIT	Alligator clips & RJ-45 adapter, alligator clips & RJ-11 adapter, Dial Tone Detec- tive [™] , RJ-11 adapter, 66 block adapter, RJ-45 adapter, F-type (F, M-Push, Speed 81, 71 [™]) connectors, RCA (M, F) connectors, BNC (M, F) connectors & 2-wire clip adapter	
CASE-PTNX-SM	Small case	
CASE-PTNX-LG	Large case	
PTNX8-ID-1-8	8-ID caps	
ADAP-PTNX-RJ11	8 RJ-11 adapters	
ADAP-PTNX-RJ45	8 RJ-45 adapters	
ADAP-PTNX-TNR	1 Toner	







PRO Cable Fault Finder

Invest in the right tool for all your technicians. The new TS®100 PRO Cable Fault Finder with PowerBT[™] Bridge Tap Detect is a telecom technician's first line of defense against bridge taps on a subscriber's line. Because a bridge tap is a significant source of DSL network performance problems due to unwanted signal reflectance, it needs to be identified and fixed quickly before the problem causes customer attrition. The TS100 PRO can accurately locate multiple bridge taps in seconds on up to 3,200 feet of cable with the touch of a button.

- Bridge tap detection for xDSL pre-qualification on up to 3,200 feet (975 meters)
- Tests opens and shorts up to 8,000 feet (2.4 kilometres)
- Sees past bridge taps to the end of the cable
- Patented SmartTone[®] tone generator with five different tones for exact pair identification
- Built-in TDR and toner
- AC/DC voltage detection and digital read out



Model	Description
TS100-PRO-BT-TDR	TS100 PRO Cable Fault Finder TDR Kit with Bridge Tap Detect
LEAD-ABNP-100	Test lead with angled-bed-of-nails and piercing pin. Compatible with the TS100 and TS100 PRO
CASE-TS100	TS100/TS100PRO pouch with Fluke Networks' logo
LEAD-ALIG-100	Test lead with alligator clips. Compatible with the TS100 and TS100 PR0
LEAD-ABN-100	Test lead with angled-bed-of-nails. Compatible with the TS100 and TS100 PR0



TS°90/TS°100 Cable Fault Finder

Fluke Networks' cable fault finders are easy-to-use, three-in-one testers; a fault locator, a cable inventory manager and a toner with SmartTone[®] technology. Easily find the distance to opens or shorts on electrical wire, telephone wire, security wire and coax. Displays distance reading rather than waveform.

- TS90 works on any two or more conductor cable up to 2,500 feet
- TS100 works on any two or more conductor cable up to 3,000 feet (metric unit also available)
- Instantly measures distance to open or short from one end of any cable pair
- Patented SmartTone[®] tone generator positively identifies pair
- Measures cable distance on spool

Model	Description
26500000	TS100 Cable Fault Finder, BNC alligator clip
26500090	TS90 cable fault finder with BNC to alligator clips
26501100	TS90/TS100 line cord, BNC to alligator clip
26501160	TS90/TS100 pouch with belt clip
26501700	TS90/TS100 line cord, BNC to banana to ABN



FIBER TESTING, TROUBLESHOOTING AND CERTIFICATION

Complete solutions for the installation, testing, documentation and certification of fiber premises cabling

The Fluke Networks' fiber test family is the industry's broadest range of tools for fiber inspection and cleaning, loss/length (Tier 1) fiber certification, fiber plant characterization and troubleshooting (Tier 2) fiber certification. From OTDRs to cleaning supplies, Fluke Networks' fiber optic tools meet the complex needs of cabling contractors, installers and network technicians. We set the standard for accuracy, ease of use and field toughness. So, whether you need simple continuity testing or advanced certification, Fluke Networks is the right choice.

FIBER	Inspect Clear	tion & ning	Loss Le	ngth (Tier 1) Certificatio	on
TESTING, TROUBLE- SHOOTING AND CERTIFICATION	FiberInspector [∞] Pro/Mini Video Microscopes	Fiber Optic Cleaning Kits	SimpliFiber* Pro Optical Power Meter & Fiber Test Kits	DTX-CLT CertiFiber" Optical Loss Test Set	DTX Series with Fiber Module
Check for fiber end-face contamination or damage	\checkmark				
Clean contamination		✓			
Check connectivity			\checkmark	\checkmark	\checkmark
Check polarity			\checkmark	\checkmark	\checkmark
Verify loss over entire link to ensure loss budget not exceeded			\checkmark	\checkmark	\checkmark
Dual-fiber loss testing				\checkmark	\checkmark
Basic (Tier 1)			\checkmark	\checkmark	\checkmark
Locate faults					
Extended (Tier 2)					
Pass/fail results				\checkmark	\checkmark
Document test results			\checkmark	\checkmark	\checkmark
Fiber types supported	Multimode Singlemode	Multimode Singlemode	Multimode Singlemode	Multimode Singlemode	Multimode Singlemode
Source type	LED		LED, FP Laser	LED, FP Laser, and VCSEL	LED, FP Laser, and VCSEL









-	
-1-1	
1	
<i>ci</i>	
	l
	l

Plant Characterization & Troubleshooting			Certificatio	n (Tier 2)		
	VisiFault" Visual Fault Locator	FindFiber Remote ID	Fiber QuickMap"	Fiber OneShot" Pro	DTX Series with Compact OTDR Module	OptiFiber® Pro OTDR
						\checkmark
	\checkmark	1	\checkmark	\checkmark	\checkmark	\checkmark
	\checkmark	\checkmark				
	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
					\checkmark	\checkmark
					\checkmark	\checkmark
				√	\checkmark	\checkmark
	Multimode Singlemode	Multimode Singlemode	Multimode	Singlemode	Multimode Singlemode	Multimode Singlemode
	Laser	Laser	Laser	Laser	LED, FP Laser	LED, FP Laser









OptiFiber® Pro OTDR

OptiFiber[®] Pro OTDR is the industry's first data center OTDR built from the ground up to meet the challenges of enterprise fiber infrastructures. This fiber troubleshooting and certification tool combines uncomplicated power with unparalleled efficiency and the exact functions needed for troubleshooting or certifying campus, datacenter and storage fiber networks.

It elevates fiber testing with the industry's only smartphone interface that turns any technician into a fiber expert. The DataCenter configuration eliminates uncertainty and errors that occur when testing data center fiber. Its ultra-short dead zones enable testing of fiber patchcords in virtualized data centers. These capabilities, plus the fastest-in-the-industry trace times, make the OptiFiber Pro OTDR the must-have tool.

- Effectively test data center fiber with the least set-up and trace time
- Accelerate fiber certification with trace times as short as two seconds in Quick Test mode
- Troubleshoot data center fiber links where short patch cables and dense connectors are common
- Maximize efficiency with a smartphone interface that allows anyone to perform expert fiber troubleshooting and certification
- Maximize return on investment by enabling customized user and project folder capabilities
- Reduce network downtime by quickly and precisely identifying faults on singlemode (SM) or multimode (MM) fiber

Model	Description	Gold 1YR	Gold 3YR
OFP-100-M	OptiFiber Pro Multimode OTDR for troubleshooting and extended certification	GLD-OFP- 100-M/S	GLD3-0FP- 100-M/S
OFP-100-M/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
0FP-100-S	OptiFiber Pro Singlemode OTDR for troubleshooting and extended certification	GLD-0FP- 100-M/S	GLD3-0FP- 100-M/S
OFP-100-S/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
0FP-100-Q	OptiFiber Pro Quad OTDR for troubleshooting and extended certification	GLD-0FP- 100-M/S	GLD3-0FP- 100-M/S
OFP-100-Q/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
OFP-100-MI	OptiFiber Pro Multimode OTDR for troubleshooting and extended certification, includes OFP-FI and accessories	GLD-OFP- 100-MI/SI	GLD3-OFP- 100-MI/SI
OFP-100-MI/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
0FP-100-SI	OptiFiber Pro Singlemode OTDR for troubleshooting and extended certification, includes OFP-FI and accessories	GLD-OFP- 100-MI/SI	GLD3-OFP- 100-MI/SI
OFP-100-SI/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
0FP-100-QI	OptiFiber Pro Quad OTDR for troubleshooting and extended certification, includes OFP-FI and accessories	GLD-OFP- 100-QI	GLD3-OFP- 100-QI
OFP-100-QI/GLD	Kit bundled with 1-year of Gold Support (available in U.S. only)	Included in Bur	ıdle
OFP-FI	FI1000 USB Video Inspector with FI1000-TIP-KIT	GLD-FI	N/A
FI1000	FI-1000 FiberInspector USB video probe for OptiFiber Pro	N/A	N/A
FI1000-SCFC-TIP	SC and FC bulkhead video probe tip	N/A	N/A
FI1000-TIP-KIT	LC, FC/SC Bulkhead, 1.25 and 2.5 mm universal tips in a box	N/A	N/A
FI1000-LC-TIP	LC bulkhead video probe tip	N/A	N/A
FI1000-ST-TIP	ST bulkhead video probe tip	N/A	N/A

Continue on the next page >>

OptiFiber Pro OTDR Models continued from previous page

Model	Description
FI1000-MU-TIP	MU bulkhead video probe tip
FFI1000-SCAPC-TIP	SC/APC bulkhead video probe tip
FI1000-LCAPC-TIP	LC/APC bulkhead video probe tip
FI1000-2.5-UTIP	2.5mm universal video probe tip for patch cords
FI1000-1.25-UTIP	1.25mm universal video probe tip for patch cords
FI1000-2.5APC-UTIP	2.5mm APC universal video probe tip for patch cords
FI1000-MPO-UTIP	MPO/MTP probe tip and translator knob for patch cords and bulkheads
FI1000-MPOAPC-UTIP	MPO/APC probe tip and translator knob for patch cords and bulkheads
FI1000-1.25APC-TIP	1.25mm APC universal video probe tip for patch cords

To learn more visit: www.flukenetworks.com/optifiberpro

OptiFiber Pro OTDR Modules/Accessories

Model	Description
PA-SC	OTDR source port interchangeable SC adapter
PA-ST	OTDR source port interchangeable ST adapter
PA-FC	OTDR source port interchangeable FC adapter
TFS-BAT	Battery
TFS-CHGR	AC adapter/charger, international
TFS-KIT-CASE	Soft case
TFS-HSTRAP	Hand strap
TFS-USB-CBL	USB interface cable standard A to micro B

Launch Fibers

Model	Description	
MMC-50-SCSC	Multimode launch cable 50 µm SC/SC	
MMC-50-SCLC	Multimode launch cable 50 µmSC/LC	
MMC-50-SCST	Multimode launch cable 50 µmSC/ST	
MMC-50-SCFC	Multimode launch cable 50 µmSC/FC	
MMC-50-SCE2K	Multimode launch cable 50 µmSC/E2K	
MMC-62-SCSC	Multimode launch cable 62.5 µmSC/SC	
MMC-62-SCLC	Multimode launch cable 62.5 µmSC/LC	
MMC-62-SCST	Multimode launch cable 62.5 µmSC/ST	
MMC-62-SCFC	Multimode launch cable 62.5 µmSC/FC	
SMC-9-SCSC	Singlemode launch cable 9 µmSC/SC	
SMC-9-SCLC	Singlemode launch cable 9 µmSC/LC	
SMC-9-SCST	Singlemode launch cable 9 µmSC/ST	
SMC-9-SCFC	Singlemode launch cable 9 µmSC/FC	
SMC-9-SCE2KAPC	Singlemode launch cable 9 µmSC/E2000 APC	



DTX Compact OTDR

Fluke Networks' Compact OTDR module is the fiber 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.

- Test and troubleshoot fiber
- 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

Copper/Multimode Fiber Certification Kit

(DTX-1800-M0) – For installing or certifying copper and fiber in datacenters.

DTX Compact OTDR Starter Kit

(DTX-QUAD-OTDR) – 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 Kit (DTX-OTDR-KIT) -

For DTX CableAnalyzer with loss/length fiber capability owners who wants to add an OTDR option and accessories.

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

For DTX CableAnalyzer without fiber capability owners who want complete fiber certification and troubleshooting capability.

DTX Copper/Fiber Troubleshooting Kit

(DTX-1800-0) – The most powerful troubleshooting capability for both copper and fiber cabling.

Model	DTX- 1800-MSO	DTX- QUAD- OTDR	DTX- OTDR-KIT	DTX-OTDR/ LL-KIT	DTX-OTDR- QMOD	DTX- 1800-MO	DTX- 1800-O
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	GLD-DTX- OTDR	GLD-DTX- OTDR	GLD-DTX- OTDR	GLD-DTX- OTDR	GLD-DTX- MO	GLD-DTX & GLD-DTX- OTDR

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	Gold 1YR	Gold 3YR
DTX-MFM2	Multimode 850 and 1300 nm	GLD-DTX-FIBERMOD	GLD-DTXFMOD-3YEAR
DTX-SFM2	Singlemode 1310 and 1550 nm	GLD-DTX-FIBERMOD	GLD-DTXFMOD-3YEAR

See page 8 for the DTX CableAnalyzer copper options.

To learn more visit: www.flukenetworks.com/dtx



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 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	Gold 1YR
DTX-CERTIFIBER-M	Multimode DTX-CLT CertiFiber – includes DTX-MFM2 and one set of 50 μm SC/SC test reference cords	GLD-DTX-CRT
DTX-CERTIFIBER-S	Singlemode DTX-CLT CertiFiber – includes DTX-SFM2 and one set of SM SC/SC test reference cords	GLD-DTX-CRT
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	GLD-DTX-CRT & GLD-DTX-FIBERMOD
DTX-CERTIFIBER/MU	Replacement mainframe for DTX-CLT CertiFiber	N/A
DTX-CERTIFIBER/RU	Replacement remote for DTX-CLT CertiFiber	N/A

To learn more visit: www.flukenetworks.com/dtx-cltcertifiber



SimpliFiber Pro[®] Optical Power Meter

SimpliFiber® Pro Optical Power Meter and Fiber Test Kits are the single "go-to" kits for anyone involved in first-line optical fiber cabling installation and verification. Designed for in-house fiber technicians as well as contractors, our expertly configured kits are housed in a professional and durable case and contain all the simple-to-use tools needed to quickly measure loss and power levels, locate faults and polarity issues, and inspect and clean connector end-faces.

- Dual-wavelength testing complete testing in half the time
- Additional wavelengths to include 1490 and 1625 calibrated to extend from typical enterprise wavelengths for other applications
- Min/Max precision tracking of intermittent power fluctuations, a superior alternative to the inaccurate "wiggle" test
- CheckActive[™] audible tone and display icon alerts you to a live wire
- Saves 1,000 results compatible with our popular LinkWare™ Cable Test Management Software



Model	Description	Gold 1YR
SFPOWERMETER	SimpliFiber Pro optical power meter; SC adapter included.	GLD-SFPRO
SFMULTIMODESOURCE	SimpliFiber Pro multimode 850/1300 light source. Fixed SC port (with ST and LC testing capability available using hybrid test-reference cord accessories purchased separately) – includes FindFiber™ source capability.	GLD-FTK
SFSINGLEMODESOURCE	SimpliFiber Pro singlemode 1310/1550 laser light source. Fixed SC port (with ST and LC testing capability available using hybrid test-reference cord accessories purchased separately) – includes FindFiber™ source capability.	GLD-FTK
SFSINGLEMODE2	SimpliFiber Pro singlemode 1490/1625 laser light source. Fixed SC port (with ST and LC testing capability available using hybrid test-reference cord accessories purchased separately). Includes FindFiberTM source capability.	



Fiber Test Kits

SimpliFiber Pro fiber test kits come in every configuration to meet your testing needs. Each fiber test kit includes the following industry-leading features:

- **Dual-wavelength testing** complete testing in half the time
- Additional wavelengths to include 1490 and 1625 calibrated to extend from typical enterprise wavelengths for broader applications
- Min/Max precision tracking of intermittent power fluctuations. A superior alternative to the inaccurate "wiggle" test
- CheckActive[™] audible tone and display icon alerts you to a live wire
- Saves 1,000 results fully compatible with our popular LinkWare™ Cable Test Management Software
- Quickly locate cable fault, polarity, and connector problems with VisiFault VFL

Complete Fiber Verification Kit (FTK1450)

The Complete Fiber Verification Kits are for network technicians and contractors who install and maintain premise networks with both multimode and singlemode optical fiber. Use these kits to verify optical loss and power levels at 850, 1300, 1310, 1550, and inspect fiber end-faces, locate cable faults, connector problems, and polarity issues.

Full-featured Inspection and Multimode Verification Kit (FTK1300 and FTK1350)

The Full-featured Inspection and Multimode Verification Kits are for network technicians and contractors who install and maintain multimode premises network. Use these kits to verify optical loss and power levels at 850 and 1300 nm, inspect fiber end-faces, locate cable faults, connector problems, and polarity issues.



Basic Verification Kit (FTK1000 and FTK2000)

The Basic Verification Kit is a great starter kit for network technicians and contractors who install and maintain fiber links. Available in single or multimode configurations, quickly verify optical loss and power levels at 850 and 1300 nm or 1310 and 1550 nm. Add additional sources, microscopes, and VFL options as needed.

Copper and Fiber Technician's Kit (CIQ-FTKSFP)

Consisting of the CableIQ (CIQ-KIT) and the SimpliFiber Pro Basic Verification Kit (FTK1000), the Copper and Fiber Technician's Kit provides a robust combination of tools to help you expertly manage your network to it keep it running smoothly and inexpensively. Simple-to-use straight from the box, you can do everything from quickly troubleshooting and qualifying cabling link bandwidth to verifying optical fiber power and loss.

FTK2100 Singlemode Fiber Verification Kit

Includes SimpliFiber Pro optical power meter, two singlemode sources (1310/1550 and 1490/1625 nm), carrying case, and SC power-meter adapter.

MS2-FTK Copper and Fiber Basic Technician's Kit

Includes the MicroScanner (MS2-100) and SimpliFiber Pro (FTK1000) Fiber Test Kit.

Model	FTK1000	FTK1300	FTK1350	FTK1450	FTK2000	FTK2100
SimpliFiber Pro Power Meter	•	•	•	•	•	•
SimpliFiber Pro Source 850/1300 MM source	•	•	•	•		
SimpliFiber Pro Sources 1310/1550 SM source				•	•	•
SimpliFiber Pro Sources 1490/1625 SM source						•
FindFiber Remote ID source		•	•	•		
FT120 200x FiberViewer		•				
FT500 FiberInspector			•	•		
VisiFault Visual Fault Locator		•	•	•		
NFC-Kit-Box (fiber optic cleaning kit)				•		
Professional durable carrying case	•	•	•	•	•	•



Fluke Networks provides an entire portfolio of fiber solutions, as well as the guidance to determine which of those tools are suited to your daily work. Discover which fiber test tools you need in your tool kit to best tackle any job. Download the brochure – Optical Fiber Test and Troubleshooting Solutions at http://www.flukenetworks.com/fibertesting

Reference Cords, Adapters and Mandrels

Model	Description
NFK1-EFLC-SC	One 62.5 µm SC/SC Encircled Flux Launch Controller (two required for DTX)
NFK1-EFLC-LC	One 62.5 µm SC/LC Encircled Flux Launch Controller (two required for DTX)
NFK2-EFLC-SC	One 50 µm SC/LC Encircled Flux Launch Controller (two required for DTX)
NFK2-EFLC-LC	One 50 µm SC/LC Encircled Flux Launch Controller (two required for DTX)
NF-MANDREL-50	Mandrel, 3 mm fiber cable, 50 μm (1)
NF-MANDREL-625	Mandrel, 3 mm fiber cable, 62.5 µm (1)
NFA-FC	FC test adapters – set of two
NFA-LC	LC test adapters - set of two
NFA-SC	SC test adapters - set of two
NFA-ST	ST test adapters - set of two
NFB1/2-LC/ST	Kit of duplex MM 62.5 μm and 50 μm test cords with LC and ST adapters
NFK1-DPLX-FC	Duplex MM 62.5 µm test reference cords for FC adapter – set of two
NFK1-DPLX-LC	Duplex MM 62.5 µm test reference cords for LC adapter – set of two
NFK1-DPLX-SC	Duplex MM 62.5 µm test reference cords for SC adapter – set of two
NFK1-DPLX-ST	Duplex MM 62.5 µm test reference cords for ST adapter – set of two
NFK1-MANDREL-KIT	Kit, mandrel, 3 mm fiber cable, 50 μm and 62.5 μm
NFK2-DPLX-FC	Duplex MM 50 μm test reference cords for FC adapter – set of two
NFK2-DPLX-LC	Duplex MM 50 μm test reference cords for LC adapter – set of two
NFK2-DPLX-SC	Duplex MM 50 μ m test reference cords for SC adapter – set of two
NFK2-DPLX-ST	Duplex MM 50 µm test reference cords for ST adapter – set of two
NFK3-DPLX-FC	Duplex SM test reference cords for FC adapter – set of two
NFK3-DPLX-LC	Duplex SM test reference cords for LC adapter – set of two
NFK3-DPLX-SC	Duplex SM test reference cords for SC adapter – set of two
NFK3-DPLX-ST	Duplex SM test reference cords for ST adapter – set of two
NFK1-SMPLX-SC	(2) Simplex MM 62.5 um test reference cords for SC adapter
NFK1-SMPLX-LC	(2) Simplex MM 62.5 um test reference cords for LC adapter
NFK1-SMPLX-ST	(2) Simplex MM 62.5 um test reference cords for ST adapter
NFK2-SMPLX-SC	(2) Simplex MM 50 um test reference cords for SC adapter
NFK2-SMPLX-LC	(2) Simplex MM 50 um test reference cords for LC adapter
NFK2-SMPLX-ST	(2) Simplex MM 50 um test reference cords for ST adapter
NFK3-SMPLX-SC	(2) Simplex SM test reference cords for SC adapter
NFK3-SMPLX-LC	(2) Simplex SM test reference cords for LC adapter
NFK3-SMPLX-ST	(2) Simplex SM test reference cords for ST adapter



Fiber QuickMap™

As a new category of enterprise fiber troubleshooter that leapfrogs the limited capability troubleshooters currently on the market, the Fiber QuickMap quickly and efficiently locates connections and breaks in multimode fiber with the press of one-button. By instantly (six second typical test time) providing distances to failures such as high loss and high reflectance incidents, it is the must-have troubleshooter for any technician who works with fiber in datacenters.

- One-button troubleshooting no lengthy set-up necessary
- Six-second test time no more blind troubleshooting that can last up to hours
- Locate high loss incidents or breaks find the most common causes of fiber failure

Model	Description	Gold 1YR
FQM-MAIN	Fiber QuickMap™ mainframe with carrying pouch	GLD-FQM
FQM-KIT	Fiber QuickMap™ Kit with SC/LC 50 µm Launch Fiber, Interchangable LC Adapter and carrying pouch	GLD-FQM
FTS900	Fiber QuickMap™ Kit with test reference cords (50 and 62.5 µm for both SC/SC and SC/LC), VisiFault Visual Fault Locator and carrying case	GLD-FQM
FTS1000	Fiber QuickMap [™] Troubleshooter Kit with test reference cords (50 and 62.5 µm for both SC/SC and SC/LC), VisiFault Visual Fault Locator, and SimpliFiber Pro power meter and multimode source and case	GLD-FQM-FTK



Fiber OneShot[™] PRO

Fiber OneShot PRO takes the complexity out of singlemode fiber testing by analyzing fiber links and measuring faults up to 15 miles in less than five seconds. Whether you are troubleshooting FTTx, Hybrid Fiber Coax (HFC), fiber links between Central Offices, or working on regional or rural access networks, Fiber OneShot PRO is your first response to fiber trouble. This new class of tester fills the gap between a VFL and OTDR because it easily and quickly locates lossy connections, high-loss faults and breaks in a singlemode fiber network.

- Measures up to 75,459 feet (23,000 metres) of fiber in seconds
- Locate severe bends, high-loss splices, breaks and dirty connectors in singlemode fiber
- Save and store up to 99 test results for later review

Model	Description	Gold 1YR
FIBR-1-SHOTPRO	Fiber OneShot PRO only—includes meter, SC adapter, 22-language quick reference guide (QRG) on CD, manual and batteries	GLD-FOS-PRO
FIBR-1-KITPRO	Fiber OneShot PRO-SC-Kit—same as SHOTPRO plus UPC-UPC 2-meter patch cord, holster and case	GLD-FOS-PRO
FIBR-1-KITPRO-VF	Fiber OneShot PRO-SC-Kit with VisiFault—everything in the PRO-SC-Kit plus the VisiFault Visual Fault Locator with 2.5 mm universal adapter	GLD-FOS-PRO
FIBR-1-KITPRO-PM	Fiber OneShot PRO-SC-Kit with SimpliFiber Pro—everything in the PRO-SC-Kit plus SimpliFiber Pro optical power meter and SC adapter	GLD-FOS- MULTIKITS
FIBR-1-KITPRO-VFPM	Fiber OneShot PRO-SC-Kit with VisiFault and SimpliFiber Pro—includes meter, SC adapter, UPC-UPC 2-meter patch cord, holster, case, 22-language QRG on CD, manual and batteries plus the VisiFault Visual Fault Locator with 2.5 mm universal adapter and SimpliFiber Pro optical power meter and SC adapter	GLD-FOS- MULTIKITS
FIBR-1-PRO-LSPM	Fiber OneShot PRO-SC-Kit with SimpliFiber Pro and Light Source—includes meter, SC adapter, UPC-UPC 2-meter patch cord, holster, case, 22-language QRG on CD, manual and batteries plus SimpliFiber Pro optical power meter and 1310nm/1550nm Light Source	GLD-FOS- MULTIKITS
Accessories		
FIBR-AC-UAPC	1-meter UPC-APC launch cord	
FIBR-UPC-CORD-2M	2-meter UPC-UPC patch cord	



Inspection and Cleaning

FiberInspector[™] Pro Video Microscope

The FiberInspector Pro is a portable, dual magnification video microscope which enables inspection of all types of installed fiber terminations in hardware devices and

Model	Description	Gold 1YR
FT600	FiberInspector Pro	GLD-
F1600	Video Microscope	FTINSPECTOR

patch panels. The video microscope projects a crisp, clear image of microscopic debris and end-face damage.

- Easily inspects fiber connectors already installed on patch panels
- Quickly determines whether fiber connectors on a hardware device are clean and in good condition without disassembling the device



FiberInspector[™] Mini Video Microscope

The FiberInspector Mini video microscope enables inspection of end-faces on all types of installed fiber. The portable video microscope projects a crisp, clear image of microscopic debris and end-face damage.

• The exceptionally convenient FiberInspector Mini uses a 200x magnification probe sufficient for inspecting both multimode and singlemode fiber

Model	Description	Gold 1YR
FT500	FiberInspector Mini Video Microscope	GLD- FTINSPECTOR
FT525	FiberInspector Mini and Cleaning Kit	GLD- FTINSPECTOR



FiberViewer[™] Fiber Microscope

The FiberViewer fiber microscope ensures a termination is clean and ready for optical transmission. Inspect multimode and singlemode fiber end-faces, and protect your eyes with the built-in safety filter.

FT120 offers 200X magnification, FT140 offers 400X magnification

Model	Description
FT120	FiberViewer, 200X
FT140	FiberViewer, 400X
NF350	1.25 mm universal microscope adapter

Inspector Adapters (For use with models FT600/FT500)

Model	Description	
NFM110	Accessory tip set for FiberInspector Mini	
NF390	APC (Angled Physical Connector) video adapter probe for FiberInspector Mini	
NFM120	Rechargeable battery for FiberInspector Mini (NIMH) for FiberInspector Mini	
NF350	1.25 mm universal microscope adapter (FT-120/FT-140)	
NF360	MT-RJ video probe adapter tip for FiberInspector Pro	
NF362	LC video probe adapter tip for FiberInspector Pro	9
NF366	E2000 video probe adapter tip for FiberInspector Pro	
NF368	1.25 mm universal video probe adapter tip for male ends for FiberInspector Pro (FT600)	
NF370	MTP/MPO video probe adapter tip for FiberInspector Pro	
NF395	APC (Angled Physical Connector) video adapter probe for FiberInspector Pro (FT600)	

VisiFault[™] Visual Fault Locator

The laser-powered VisiFault Visual Fault Locator (VFL) traces fibers, verifies continuity and polarity, and helps find breaks in cables, connectors and splices. Continuous and flashing modes for easier identification. Compatible with 2.5 mm and 1.25 mm connectors for easy connection.

Bright red visible laser light source, features continuous and flashing modes

• Accelerates end-to-end fiber continuity checks

Model	Description	
VisiFault	VisiFault Visual Fault Locator with 2.5 mm universal adapter	
NF380	1.25 mm Universal VisiFault Adpater	

Speeds fiber tracing and identification



Fiber Optic Cleaning Kits

Contaminated end-faces are the #1 cause of fiber link failure. Prevent this common problem with Fluke Networks' Fiber Optic Cleaning Kits and Components. These precision fiber optic cleaning kits and components allow effective removal of all contaminants from end-faces on both patch cords and inside ports.

- Everything needed for precision cleaning of end-faces on both patch cords and inside ports
- Compact form factor options available. Specially formulated solvent dissolves contaminants, neutralizes static charge and encapsulates particles for removal
- A range of wiper swabs enable decontamination of all styles of fiber optic connections
- Use the convenient and rugged carrying case to store all of the cleaning components

Model	Description
NFC-Kit-Case	Fiber Optic Cleaning Kit – includes cleaning cube with wipes, ten cards with sealed cleaning zones, solvent pen, 2.5 mm port cleaning swabs and 1.25 mm port cleaning swabs in a rugged carrying case.
NFC-Kit-Box	Fiber Optic Cleaning Kit – includes cleaning cube with wipes, five cards with sealed cleaning zones, solvent pen and 2.5 mm port cleaning swabs.
NFC-Cube	Cleaning cube with wipes – cleans up to 500 end-faces
NFC-Cards-5pack	5 cards with 12 sealed cleaning zones each – perfect for troubleshooting
NFC-SolventPen	Special solvent dispensed from pen (9 g)
NFC-Swabs-1.25mm	LC and MU port cleaning swabs (25 count)
NFC-Swabs-2.5mm	SC, ST, 2.5 mm port cleaning swabs (50 count)
NFC-Case	Carrying case for cleaning accessories
NFC-IBC-1.25mm	OneClick cleaners for 1.25 mm LC and MU connector and patch cord (5 qty)
NFC-IBC-2.5mm	OneClick cleaners for 2.5 mm SC, ST, FC connector and patch cord (5 qty)
NFC-IBC-MPO	OneClick cleaners for MPO/MTP connector (5 qty)
NFC-KIT-CASE-E	Enhanced Fiber Optic Cleaning Kit - includes (1) OneClick cleaner for 1.25mm connector, (1) OneClick cleaner for 2.5mm connector, (1) OneClick cleaner for MPO/MTP cleaner, a solvent pen, a cleaning cube and a softcase
FT525	FiberInspector Mini and Cleaning Kit







PA RECOMMENDATION

THIS SIDE DOWN

TOOLS AND TEST KITS

Fluke Networks offers a wide range of network installation tools - each one designed to streamline the network installation job

Fluke Networks offers the most reliable set of network installation tools on the market – each one designed to streamline the network installation job. We have all the essential tools you need for installation and termination of high-performance voice, data and video networks. The JackRapid™ Termination Tool saves time and increases accuracy by seating and terminating all wires at once with a simple squeeze of the handle. The Pro-Tool Kits combine all professional tools you need to cut, strip, clean and connect network phone and data lines to blocks and jacks. Our world-renowned punchdown tools, with a variety of interchangeable blades, deliver high-quality, accurate terminations on the first punch. Industry standard Electrical Contractor Telecom Kits offer all the telecommunications tools and test equipment technicians need in one durable case.



JackRapid[™] Termination Tool

The JackRapid termination tool is the industry's most innovative and time-saving installation tool. JackRapid allows you to terminate jacks eight times faster than traditional impact tools – with accuracy that's unmatched. The patented jack termination tool seats and terminates all wires simultaneously with one squeeze of an ergonomic handle. The built-in blade cuts off the excess wire after it is seated in the connector, eliminating the need for a secondary trim step. Simple, one-handed operation reduces hand fatigue. With JackRapid, you'll never punch into the palm of your hand or through drywall again.

- Cuts installation time easy-to-use handle, seats and cuts all wires at once, saving you up to two minutes installation time per jack
- High-quality, consistent terminations no more compromised connections and wasted jacks
- Simple, one-handed operation with an ergonomically designed handle reduces hand fatigue

Model	Description
JR-LEV-1	JackRapid termination tool (for Leviton 41106, 41108, 5G108)
JR-LEV-1-H	JackRapid replacement blade head (for Leviton 41106, 41108, 5G108)
JR-SYS-UNI-1	JackRapid termination tool (for Systimax MPS100E, C5,M1BH and Uniprise UNJ600/500/300)
JR-SYS-UNI-1-H	JackRapid replacement blade head (for Systimax MPS100E, C5, M1BH and Uniprise UNJ600/500/300)
JR-LEV-2	JackRapid termination tool (for Leviton 61110, 5G110, 6110G)
JR-LEV-2-H	JackRapid replacement blade head (for Leviton 61110, 5G110, 6110G)
JR-SYS-2	JackRapid termination tool (for Systimax MGS400, MGS500, MFP420, MFP520)
JR-SYS-2-H	JackRapid replacement blade head (for Systimax MGS400,MGS500, MFP420, MFP520)
JR-ORT-2	JackRapid termination tool (for Ortronics TJ5E00, TJ600, TJ610)
JR-ORT-2-H	JackRapid replacement blade head (for Ortronics TJ5E00,TJ600, TJ610)
JR-ADC-2	JackRapid termination tool (for ADC KM8, Copper Ten®)
JR-ADC-2-H	JackRapid replacement blade head (for ADC KM8, Copper Ten®)
JR-ERGOHANDLE	JackRapid ergonomic handle
JR-PAN-2	JackRapid termination tool (for Panduit NK688M)
JR-PAN-2-H	JackRapid replacement blade head (for Panduit NK688M)

Get accurate terminations and clean, consistent cuts every time with the JackRapid Termination Tool.



1. Strip cable jacket with a standard cable stripper or the built-in cable stripper.



 Ensure jack is completely and securely inserted in jack holder bed with IDC slots facing the blades.



Determine wiring scheme.
 Dress all four pairs (eight wires).



5. Pull trigger completely and remove excess wire prior to releasing trigger.



3. Insert jack in JackRapid front first with IDC slots facing blades of JackRapid.



6. Wires will be seated and cut for a solid termination.



D914[™]S Impact Tool

SoftTouch D914S Impact Tool offers a new ergonomic design with a soft rubber handle for better grip and rounded edges to absorb more of the impact recoil. Includes built-in probe pic/ spudger and torque, allowing you to choose from high-and low-impact settings.

- Industry standard, internationally accepted with lifetime warranty
- Hook and spudger tools are built into the handle
- Automatic spring handle choose low impact for 24/26 gauge wire or high impact for 22-gauge wire

The D914 Impact Tool is the only punchdown tool to combine torque and impact. It combines two versatile tools, the hook and spudger, into the handle. 66/110 blades available. Ensures clean, smooth terminations ready for

Industry standard, internationally accepted with

Hook and spudger tools are built into the handle Automatic spring handle - choose low impact for 24/26

gauge wire or high impact for 22-gauge wire Accept Phillips-head or flat screwdriver blade

Accepts Phillips-head or flat screwdriver blade

Model	Description
10061000	D914S Impact Tool
10061100	Tool with EverSharp 66 blade
10061110	Tool with EverSharp 110 blade
10061501	Tool with EverSharp 110, Ever- Sharp 66 blade and free screw- driver blade
10061503	Tool with BIX and EverSharp 66/110 cut blade
10061810	Tool with EverSharp 66/110 blade

Model	Description
10051000	D914 Impact Tool
10051100	Tool with EverSharp 66 blade
10051110	Tool with EverSharp 110 blade
10051120	Tool with EverSharp 110 and EverSharp 66 blade
10051501	Tool with EverSharp 110, EverSharp 66 blade and free screwdriver blade

10051000	D914 Impact Tool	
10051100	Tool with EverSharp 66 blade	
10051110	Tool with EverSharp 110 blade	
10051120	Tool with EverSharp 110 and EverSharp 66 blade	
10051501	Tool with EverSharp 110, EverSharp 66 blade and free screwdriver blade	

1-1
E
1.51

D814[™] Impact Tool

D914[™] Impact Tool

optical transmission

lifetime warranty

The D814 Impact Tool is a deluxe, all-in-one, telecom punchdown tool and comes with the 66/110 blade. Impact wheel has high and low settings. Automatic spring mechanism provides the right impact to seat and/or terminate wires.

- Industry standard with lifetime warranty
- Accepts standard industry blades
- Lightweight and easy-to-use
- Adjustable spring impact mechanism allows low impact for 24/26 gauge wire or high impact for 22-gauge wire

Model	Description
10054000	D814 Impact Tool
10055000	Tool with EverSharp 66 blade
10055110	Tool with EverSharp 110 blade
10055200	Tool with EverSharp 110 and EverSharp 66 blade
10055501	Tool with EverSharp 110, EverSharp 66 blade and free Wood Screw Starter Punch blade
10055503	Tool with BIX and Eversharp 66/110 cut blade



D-Impactor[™] 5-Pair Impact Tool

The D-Impactor 5-pair impact tool easily cuts and terminates five copper pairs on a 110 block. This rugged, easy-to-use tool saves time and minimizes hand stress. The patented individually molded blades eliminate the chance of metallic shorts ensuring optimal performance of your network. Lifetime warranty.

- Single reversible blade part
- Ease of use and reversing of cutting blade
- Fewer moving parts allow for smoother push down, less hand stress

Model	Description
10059000	D-Impactor (five-pair 110 impact tool)
10059030	D-Impactor replacement blade





EverSharp[™] Blades

Fluke Networks offers three EverSharp blade designs: the EverSharp 66/110 cut blade, the EverSharp 110 blade and the EverSharp 66 blades. Through special processing of the metal, these high performance blades stay sharper longer than other competitive blades. These blades fit the D914S, D914 and D814 punchdown tools.

Model	Description
10056500	EverSharp 66 blade
10176500	EverSharp 110 blade
10178600	EverSharp 110/66 cut blade

Blade Storage Kit

This unique blade storage case helps prevent loss, misplacement and damage of impact blades by keeping them all together in one convenient hard case. They are sized to fit neatly into shirt or pants pocket or clipped onto belt or tool pouch.

Model	Description
10979003	66 blade kit (2-66 blades, 1-630 blade, 1-Wood Screw Starter blade)
10979004	110 blade kit (2-110 blades, 1-66 blade, 1-Wood Screw Starter blade)
10979002	Blade storage case only

Blades

Fluke Networks increases the versatility and flexibility of its line of impact tools by offering a wide variety of interchangeable blades that permit each tool to perform multiple functions. From our high-performance EverSharp blades, to our unique blade storage kit cases, Fluke Networks has the blades you need to terminate blocks and jacks quickly.

	and the second second			1	
10056000	10057000	10176000	10436001	10465001	10645001
66 blade	630 blade	110 blade	Centerpunch blade	3M System D blade	Wood screw starter
10056225 66 blade, bulk (must be ordered in multiples of 100)		10176225 110 blade, bulk (must be ordered in multiples of 100)			punch
1 miles	Alter A				
10565000	10565110	10665000	10051200	10051300	
Cut blade, compatible with Krone/ADC	Cut blade, compatible with Krone/ADC, 110	BIX blade	Screwdriver blade (D914 or D914S only)	Torque Adapter blade	

Pro-Tool[™] Kits

All the professional tools you need to cut, strip, clean and connect network phone and data lines to blocks and jacks. Bundled together in our sleek form-fitting PVC Dur-A-Grip[™] tool pouch – holds your tools securely inside, even upside down. Five tool kit combinations to choose from to meet a multitude of applications.



Kit	Des	crip	otio	ns
-----	-----	------	------	----

Pro-Tool Kit Model	IS60	1550	IS40
D914S impact tool	•	•	
D814 impact tool			•
Electrician's D-Snips	•	•	•
Cable stripper	•	•	•
Mini Maglite®	•		
Dur-a-Grip pouch	•	•	•
EverSharp 66/110 cut blade	•	•	•
Probe pic			•

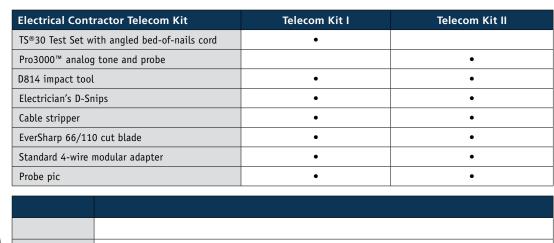
Description
IS40 Pro-Tool kit
Pro-Tool kit IS40 pouch only
IS50 Pro-Tool kit
Pro-Tool kit IS50 pouch only
IS60 Pro-Tool kit
Pro-Tool kit IS60 pouch only

Electrical Contractor Telecom Kits

Fluke Networks Electrical Contractor Telecom Kits are comprised of industry standard telecommunications tools and test equipment. Contents include D814[™] impact tool, cable stripper, probe pic, Electrican's D-Snips, standard 4-wire modular adapter and EverSharp[™] 66/110 cut blade. Soft carrying case included for easy organization.



Kit II





Modular Crimper

This is an all-in-one crimping tool for WESS type 6- and 8-position modular telephone plugs. Crimps 8-position RJ-45 connectors and 4- and 6-position RJ-11 and RJ-12 connectors.

• Embedded flat cable cutter and stripper

Model	Description
11212530	Modular crimper



Cable Splicing Knife

This cable splicing knife is the perfect tool for splitting cable sheaths. Soft, no-slip, easy-to-grip handle and cutlery-steel blade for durability and long-lasting blade edge.

- Short blade (1.75 in) for strength
- Cutlery-steel blade for durability
- Cuts various insulation types

D-Snips[™]

The electrician's D-Snips[™] offer a unique ergonomically-designed handle that leverages your power.

- Ergonomic design provides 1¹/₂ times the cutting force with half the effort
- High-quality forged steel construction for strength and durability
- File and scraper on both blades for cleaning wire
- Notched blade for stripping 19- and 23-gauge wire
- Cuts up to 16-gauge solid and 12-gauge stranded wire

Model	Description
44300000	D-Snips



Model	Description
44500000	Electrician's snips

Electrician's Snips

These versatile electrician's snips feature a file and scraper on both blades for easy wire cleaning. They also feature a handy notched scissor blade for quickly stripping 19- and 23-gauge wire.

- High-quality forged steel construction for strength and durability
- File and scraper on both blades for cleaning wire
- Notched blade for stripping 19- and 23-gauge wire
- Cuts up to 16-gauge solid and 12-gauge stranded wire
- Serrated blade for non-slip wire cutting



Cable Strippers

This line of cable strippers includes a double slotted cable stripper for 22/24 AWG wire installation and a coax stripper to perform 2-level and 3-level stripping of RG58/59 coaxial cables. We also offer a combo stripper that cuts and rings Teflon[®], smoothly slits fiber, copper and coaxial cables and rings 25-100 pair cable.

- Full line of cable strippers for any job
- Round cable stripper for a variety of flexible round cable
- Coax strippers with two or three levels

Model	Description
11230002	Cable stripper (round cable)
44210013	Double slotted stripper with cut- ter, 22/24 gauge
44200013	Double slotted stripper 22/24 gauge
11231257	Coax stripper, 2-level
11231255	Coax stripper, 2 and 3-level
44210015	Double-slotted stripper with cut- ter, 24/26 gauge

Need-L-Lock[™] Crimping Pliers

The Need-L-Lock pliers' patented four-in-one tool combines UR/UY/UG connector crimper with needle-nose pliers so you

can carry one less tool on your belt. Aligned crimping jaws come down square ensuring a solid connection. Jaws are grooved to provide a better grip on wires and feature a built-in cutter and wire stripper.

Needle nose pliers

- UR/UY/UG connector crimper
- Wire stripper hole
- Built-in side cutter
- Rubber coated handles for non-slip grip

Probe Pic

This handy, pocket-sized insulation probe is ideal for

checking for loose or damaged connections or to spread apart wires for direct access. Its compact size also makes it perfect for using the pic end for tracing or pulling

wires from a bunch.

- Trace and pull wires with the pic end
- Check for loose or damaged connections
- Spread apart wires for direct access

Can Wrench

This can wrench allows universal access to telephone boxes and pedestals. Open telephone box fasteners and tightens nuts on binding post terminals.

Two hex head sockets (7/16 inch and 3/8 inch)

- Color-coded socket ends for quick size identification
- Wrench body constructed of tough, impact resistant and abrasion resistant material
- Socket ends guaranteed not to split or break up to a maximum torque of 45 pounds
- Two models available with wire stripper in handle (22 or 24 gauge)

Model	Description
44007000	Can wrench, hex head
44507003	Can wrench with stripper, 22 gauge
44507004	Can wrench with stripper, 24 gauge
10660001	Security key insert

Description

Need-L-Lock crimping pliers

Model

11294000

ModelDescription44600000Probe pic, 105 degree



IT Networking

Test and Troubleshoot					
LinkRunner [™] AT Network Auto-Tester					
AirCheck™ Wi-Fi Tester					
NetTool [™] Series II Inline Network Tester					
EtherScope [™] Series II Network Assistant 40					
Monitoring, Analysis and Troubleshooting					
AirMagnet Spectrum XT 42					
AirMagnet VoFi Analyzer					
AirMagnet Enterprise 42					
AirMagnet Survey 43					
AirMagnet Planner					
AirMagnet WiFi Analyzer					
OptiView [®] XG Network Analysis Tablet					
ClearSight™ Analyzer 45					
Network Time Machine [™]					
Tap Solutions					



-----STATISTICS IN CONTRACTOR OF THE OWNER OWNER

TEST AND TROUBLESHOOT

Complete line of portable network testers to give frontline technicians vision into their LAN, WLAN and VLAN networks

Today's networks are typically stable. The problem is they aren't static. Management and users are constantly demanding new technologies, new services and better performance, which inevitably requires changing infrastructure, deploying new applications, and dealing with security.

With Fluke Networks family of portable network testers, frontline technicians get a unique view into their LAN, WLAN, and VLAN networks. These tools help network professionals clearly see all aspects of their network. Moves, adds, and changes as well as complex troubleshooting tasks are sped up with the use of these testers. Take these tools anywhere, anytime, to isolate any problem... fast.



LinkRunner[™] AT Network Auto-Tester

LinkRunner AT Network Auto-Tester is the fastest way to solve network connectivity problems. This rugged, handheld network tester takes the guesswork out of troubleshooting with its complete one-button AutoTest. AutoTest performs your required set of connectivity tests in seconds, enabling you to accurately and quickly identify and solve network problems.

- Fast answers: AutoTest accurately identifies network problems in seconds
- **Two models available:** LRAT-2000 adds fiber, TruePower™ PoE loading, IPv6, reflection and 50 reports instead of 10
- Verify connections at 10M/100M/1G on copper and fiber: Instantly verify link status, connection type, signal strength and traffic
- Nearest switch and VLAN information: Displays the VLAN and nearest switch model, slot and port
- **TruePower™ PoE testing:** Quickly validate PoE performance by drawing actual power up to the 802.3at standard 25.5W
- Document results: Store up to 50 test results and download to your PC
- Instant-on: Boots in under 3 seconds

Model	Description	Gold 1YR	Gold 3YR
LRAT-1000	LinkRunner AT 1000 tester with Li-ion battery (until June 30, 2012), LinkRunner Manager software CD, USB cable, Getting Started Guide and soft case.	GLD-LRAT	GLD3-LRAT
LRAT-2000	Includes all LRAT-1000 features plus: fiber, TruePower [™] PoE loading, IPv6, reflec- tion and 50 reports instead of 10. LRAT-2000 includes: LinkRunner AT 2000 with Li-ion battery (until June 30, 2012), Wireview Cable ID #1, LinkRunner Manager software CD, USB cable, RJ-45 coupler, Getting Started Guide and soft case.	GLD-LRAT	GLD3-LRAT
ACK-LRAT2000	AirCheck tester and external directional antenna, LinkRunner AT 2000 tester, AirCheck external directional antenna, spare Li-ion battery for either AirCheck or LinkRunner, and deluxe carrying case.	GLD-ACK & GLD-LRAT	GLD-ACK-3YR & GLD3-LRAT
LRAT-2000-FTK	LinkRunner AT 2000, SimpliFiber Pro optical power meter, 850/1300 multimode source, VisiFault VFL, FT120 FiberViewer, FindFiber Remote ID source, carrying case and SC, ST, and LC power meter adapters.	GLD-LRAT & GLD-SFPRO	N/A
LRAT-2000-KIT	LinkRunner AT 2000, IntelliTone Pro 200 Probe, WireView Cable IDs #1-6, Link- Runner Manager software CD, test accessory soft pouch, USB cable, LinkRunner AT and IntelliTone, one 9V alkaline battery, packaged in a deluxe carrying case.	GLD-LRAT	GLD3-LRAT
LRAT-2000-5PK*	5 LRAT-2000s and 5 LinkRunner AT Mobility Kits. Each kit includes an auto charger and holster.	GLD-LRAT (x5)	GLD3-LRAT (x5)
LRAT-2000-10PK *	11 LRAT-2000s and 11 LinkRunner AT Mobility Kits. Each Mobility Kit includes an auto charger and holster.		



AirCheck[™] Wi-Fi Tester

AirCheck allows users to quickly verify and troubleshoot 802.11 a/b/g/n network availability, connectivity, and security all in a dedicated, handheld tool. Its one-button AutoTest quickly provides a pass/fail indication of the wireless environment and identifies common problems such as interference, overloaded networks, rogue devices, coverage, and security issues.

- Dedicated, handheld 802.11 a/b/g/n wireless network tester with instant-on technology
- One-button AutoTest quickly provides a pass/fail indication of the wireless environment and identifies common problems for any level of Wi-Fi technician's expertise.
- See wireless network utilization by channel and quickly determine if it is 802.11 traffic or non-802.11 interference
- Robust and in-depth WLAN connection tests from probing to DHCP request to ping
- Identify and assess availability and security of access points and clients even locate them physically
- Fully document your troubleshooting session thus enabling fast trouble ticket resolution or problem escalation



Model	Description	Gold 1YR	Gold 3YR
AirCheck	AirCheck Wi-Fi Tester – includes AirCheck tester, USB cable, soft case, Get- ting Started Guide, and CD with AirCheck Manager software and User Manual	GLD-ACK	GLD-ACK-3YR
AirCheck-LE	Includes AirCheck tester, holster, external directional antenna, auto charger, getting started guide for Law Enforcement	GLD-ACK	GLD-ACK-3YR
ACK-LRAT2000	Network Tech Frontline Troubleshooting Kit w/ACK, LinkRunner™ AT 2000 - Includes AirCheck™ tester, LinkRunner AT 2000 tester, AirCheck external directional antenna, spare Li-ion battery for either unit and deluxe carrying case	GLD-ACK & GLD-LRAT	GLD-ACK-3YR & GLD3-LRAT
AIRCHECK-5PK*	AirCheck 5 Pack – includes five (5) AirCheck testers and five (5) free external directional antennas	GLD-ACK (x5)	GLD-ACK-3YR (x5)
AIRCHECK-10PK*	AirCheck 10 pack – includes a bonus free AirCheck tester, so you receive 11 AirCheck testers, and 11 free directional antennas	GLD-ACK (x5)	GLD-ACK-3YR (x5)
ACK-LRAT-CIQ	Includes AirCheck™ tester and external directional antenna, LinkRunner AT 2000 tester, spare Li-Ion battery for either unit, deluxe carrying case and a CableIQ™ Qualification tester	GLD-ACK, GLD-LRAT & GLD-CIQ	N/A
ES2-PRO-SX/I-ACK	EtherScope Series 2 LAN WLAN SX Fiber ITO + AirCheck – includes AirCheck Wi-Fi Tester and EtherScope Series 2 LAN and WLAN with fiber and ITO options	GLD-ES & GLD-ACK	GLD-ES-3YR & GLD-ACK-3YR
ES2-PRO-SXI-LR-ACK	EtherScope S2 LAN WLAN SX Fiber ITO + LRPRO + AirCheck-Kit – includes AirCheck Wi-Fi Tester with extra Lithium Ion battery, directional antenna and hardcase, EtherScope Series 2 LAN and WLAN with fiber and ITO options, and LinkRunner Pro with Reflector, Lithium Ion battery, and software case	GLD-ES, GLD-LR & GLD-ACK	GLD-ES-3YR, GLD-LR-3YR & GLD-ACK-3YR
Α			



NetTool[™] Series II Inline Network Tester

Isolate and document network device and application connectivity issues in seconds. See connectivity to key network devices and services with NetProve[™] diagnostics – the fastest way to isolate the source of the problem – whether the cause is the LAN, WAN, firewall, server or application. Verify the readiness of PoE systems and troubleshoot PoE device.

- Monitoring and authentication identify spyware, malware and viruses with port monitoring; troubleshoot authentication issues with 802.1x log. Quickly resolve and document network problems with powerful inline visibility into 10/100/Gig links between switches, PCs, IP phones and other devices
- Connect inline for visibility into VoIP calls to quickly diagnose IP phone boot-up and call control problems and to measure key call quality metrics
- IntelliTone digital cable location and isolation technology speeds cable troubleshooting
- Create comprehensive reports of your network.

Model	Description	Gold 1YR	Gold 3YR
NTS2-NSKIT	NetTool Series II Network Service Kit – includes 10/100/1000 Mbps inline, VoIP option, monitoring and authentication option, NetProve diagnostics, IntelliTone ton- ing, IntelliTone Pro 200 Probe, NetTool Connect PC software, WireView Wiremappers #1-6 and deluxe carrying case	GLD-NT	GLD-NT-3YR
NTS2-VOIP	NetTool Series II Pro VoIP – includes 10/100/1000 Mbps inline, VoIP option, NetProve diagnostics, IntelliTone toning, NetTool Connect PC software, WireView Wiremapper #1 and soft carrying case	GLD-NT	GLD-NT-3YR
NTS2-PRO	NetTool Series II Pro – includes 10/100/1000 Mbps inline, NetProve diagnostics, IntelliTone toning, NetTool Connect PC software, WireView Wiremapper #1 and soft carrying case	GLD-NT	GLD-NT-3YR
NT-VOIP	NetTool 10/100 Pro VoIP – includes 10/100 Mbps inline, VoIP option, NetTool Blaster PC software, NetTool Cable Identifier and soft carrying case	GLD-NT	GLD-NT-3YR
NT-PRO	NetTool 10/100 Pro – includes 10/100 Mbps inline, NetTool Blaster PC software, Net- Tool Cable Identifier, set of four AA alkaline batteries, serial cable, Ethernet cable, Getting Started Guide, CD with multilanguage user manuals and soft carrying case		GLD-NT-3YR
NT	NetTool 10/100 – includes 10/100 Mbps single-ended testing, NetTool Blaster PC software, NetTool Cable Identifier and soft carrying case	GLD-NT	GLD-NT-3YR
Options			
NT-PRO-OPT	Upgrade from NT to NT-PRO		
NTS2-MONAUTH-OPT	Add monitoring and authentication capabilities to NTS2-PRO or NTS2-VOIP		
NT-VOIP-OPT	Upgrade from NT-PRO to NT-VOIP		
NTS2-VOIP-OPT	Upgrade from NTS2-PRO to NTS2-VOIP		
Α			

EtherScope[™] Series II Network Assistant



A handheld 10/100/Gigabit and 802.11 wireless LAN analyzer that helps frontline IT professionals troubleshoot problems fast (or prove it's not the network), diagnosis LAN health instantly, complete projects faster, validate the availability and responsiveness of LAN services, and measure Ethernet link performance.

- The right combination of troubleshooting tools in a handheld platform to help network professionals solve a wide range of problems fast
- Complete projects faster by verifying configurations and connections, and troubleshooting issues during adds, moves and changes
- Validate and document the availability and responsiveness of essential applications and the performance of the network after project completion
- Analyze 10/100/Gigabit twisted pair and 100/Gigabit fiber optic Ethernet LANs. Troubleshoot switched networks. Discover devices, networks and VLANs. Monitor traffic statistics



- Analyze 802.11a/b/g wireless LANs. Troubleshoot performance and connectivity issues. Discover access points, mobile clients and networks. Secure your WLAN. Identify and locate unauthorized rogue devices, including 802.11n access points
- Measure the end-to-end Ethernet performance of twisted pair and fiber optic LAN and WAN links using IETF RFC 2544 and advanced tests at rates up to 1 Gbps

Model	Description	Gold 1YR	Gold 3YR
ES2-LAN-SX	EtherScope Series II Network Assistant with 802.3 LAN analysis and fiber optic interface	GLD-ES	GLD-ES-3YR
ES2-LAN-SX/I-LRAT	Kit – includes an EtherScope Series II Network Assistant with 802.3 LAN analysis, fiber optic interface, and ITO/RFC 2544 tests; plus a LinkRunner AT and carrying case	GLD-ES & GLD-LRAT	GLD-ES-3YR & GLD3-LRAT
ES2-PRO-SX/I-ACK*	Kit – includes an EtherScope Series II Network Assistant with 802.3 LAN analysis, 802.11 WLAN analysis, fiber optic interface, and ITO/RFC 2544 tests; plus an AirCheck Wi-Fi Tester	GLD-ES & GLD-ACK	GLD-ES-3YR & GLD-ACK-3YR
ES2-PRO-SXILRATACK*	Kit – includes an EtherScope Series II Network Assistant with 802.3 LAN analysis, 802.11 WLAN analysis, fiber optic interface, ITO/RFC 2544 tests, a comprehensive set of accessories, and a larger carrying case; plus a LinkRunner AT and carrying case; plus an AirCheck Wi-Fi Tester with extra battery, directional antenna, and hard carrying case	GLD-ES, GLD-ACK & GLD-LRAT	GLD-ES-3YR, GLD-ACK-3YR & GLD3-LRAT
Options			
ES-WLAN-OPT	802.11a/b/g WLAN analysis option, PCMCIA radio card, external directional antenna	N/A	N/A
ES-ITO-OPT	ITO/RFC2544 option – includes Service Performance tool, traffic generator, ProVision, RFC2544 and advanced performance tests	N/A	N/A
А			

*Note: For sale only in countries where AirCheck is certified

MONITORING, ANALYSIS AND TROUBLESHOOTING

Get the complete picture for monitoring, analyzing and troubleshooting networks and applications

Managing today's networks requires a range of visibility – from overall network health, to end-user experience, to in-depth "on-the-wire" analysis. Performance needs to be monitored and root causes pinpointed for key devices, links and applications anywhere on the network.

To do this with confidence, you need a complete picture of what's happening on your network. Fluke Networks' family of analyzers delivers the breadth of visibility and depth of analysis you need for monitoring, analyzing and troubleshooting networks and applications.

www.electrolux.mk www.uteco.mk



AirMagnet Spectrum XT

AirMagnet Spectrum XT is the first professional spectrum analyzer that combines and correlates in-depth RF analysis of non-Wi-Fi interference sources with real-time WLAN information. The result is quicker and more accurate WLAN performance troubleshooting. By viewing the impact of RF interference on the network's overall performance, network managers can pinpoint the root cause of the problem. The tool detects, identifies and helps physically locate non-Wi-Fi sources of interference that operate in the 2.4GHz, 4.9GHz and 5GHz frequency bands, such as Bluetooth, microwave ovens, cordless phones, digital video monitors, ZigBee devices, game controllers, RF jammers, wireless cameras, radars and more. Entry-level version also available - AirMedic USB.

- Visualize impact of RF interference on WLAN performance
- Automatically detect and identify WLAN and non-WLAN interference sources
- Physically locate RF interference sources

Model	Version	Description	Gold 1YR
AM/B4070	3.0.1	AirMagnet Spectrum XT (USB-based); spectrum analysis	GLD-S4070 (Avail- able in "G" SKU)



AirMagnet VoFi Analyzer

AirMagnet VoFi Analyzer is the industry's only solution built for troubleshooting VoWLAN issues. It addresses all aspects of wireless voice and diagnoses problems rooted within the end-user's phone, QoS, RF, WLAN, and even wired network problems associated with voice over Wi-Fi. AirMagnet VoFi Analyzer integrates with AirMagnet Survey software to additionally validate and optimize phone call quality.

- Detect any 802.11a/b/g voice-over-WLAN call
- Full call quality analysis of encrypted wireless voice traffic
- Automatically diagnose and troubleshoot over 60 types of wireless voice call problems

Model	Version	Description	Gold 1YR
AM/A2210	4.0	Mobile software tool for voice-over-wireless analysis and troubleshooting	GLD-S2210 (Avail- able in "G" SKU)



AirMagnet Enterprise

AirMagnet Enterprise is a full-time wireless IDS/IPS and WLAN monitoring system that provides complete protection for all of a business's wireless assets worldwide. The solution can automatically detect hundreds of threats, block and prevent attacks, trace and locate problems, capture event forensics, troubleshoot performance problems remotely and document and enforce compliance with internal and regulatory policies.

- Continuous monitoring of the entire wireless airspace
- Automatic detection and remediation of all wireless threats
- Trace, locate, map and capture forensics for any WLAN or RF event

Model	Version	Description	Gold 1YR
AM/A5505, AM/ A5509,AM/A5225, AM/5220, AM/ A5115, AM/A5106	10	24x7 wireless intrusion prevention, performance monitoring and remote troubleshooting	GLD-S5505, GLD-S5509, GLD-S5225, GLD-S5220, GLD-S5115, GLD-S5106 (Available in "G" SKU)



AirMagnet Survey

AirMagnet Survey is the industry's most accurate solution for planning and designing 802.11a/b/g/n networks for optimal performance, security and compliance. It calculates the ideal quantity, placement and configuration of APs for a successful WLAN deployment. AirMagnet Survey plots actual end-user network performance metrics such as data rates, actual per-user throughput and packet losses and retries. This information provides a complete Wi-Fi "weather map of the environment." (Available in PRO and Express versions)

- 802.11a/b/g/n and 4.9 GHz site surveying of indoor and outdoor networks
- Industry's only active and Iperf surveying capability for real-world true "uplink/downlink performance management"
- Determine ideal quantity, placement and configuration of APs for optimal security, performance and compliance

Model	Version	Description	Gold 1YR
AM/A4010, AM/A4015	8.2	Site survey solution for designing and optimizing wireless networks	GLD-S4010, GLD-S4015 (Available in "G" SKU)



AirMagnet Planner

AirMagnet Planner takes the guesswork out of WLAN design and installation, making it easy for network professionals to accurately plan and deploy 802.11-based wireless networks in any indoor environment. It accounts for building materials, obstructions, access point configurations, antenna patterns and a host of other variables to provide a reliable predictive map of Wi-Fi signal and performance.

- Plan and design 802.11a/b/g/n indoor WLAN networks
- Predictive modeling to determine ideal quantity, placement and configuration of APs for optimal security, performance and compliance
- Model building construction materials/obstructions and 802.11 APs

Model	Version	Description	Gold 1YR
AM/A4012	8.2	Mobile software tool for wireless network planning	GLD-S4012 (Available in "G" SKU)



AirMagnet WiFi Analyzer

AirMagnet WiFi Analyzer is the industry-standard mobile tool for auditing and troubleshooting enterprise wireless networks. AirMagnet WiFi Analyzer helps IT staff quickly solve end-user connectivity and performance issues while automatically detecting security threats, wireless network vulnerabilities and regulatory compliance status. The built-in analysis engine, AirWISE®, automatically provides instant answers on problem causes, symptoms, fixes and how to avoid future occurrences.

- 802.11a/b/g/n and 4.9 GHz monitoring, management and troubleshooting
- Thorough inventory details for every detected Wi-Fi device
- Classify and physically locate unauthorized (rogue) devices or any policy violator

Model	Version	Description	Gold 1YR
AM/A1150,	9.2	Onsite analysis software for wireless net-	GLD-S1150, GLD-S1170
AM/A1170		work security, analysis and troubleshooting	(Available in "G" SKU)



OptiView® XG Network Analysis Tablet

Dedicated tablet for automated network and application analysis – the fastest way to see root cause.

Tablet with dedicated custom hardware for automated network and application analysis in the deployment and troubleshooting of new technologies. Unique features including proactive analysis, path analysis, and application-centric analysis get to root cause faster than ever before.

- Tablet form factor with powerful consolidated functionalities providing automated analysis for 10 /100 Mbps, 1/10 Gbps and 802.11a/b/g/n wireless LANs
- Intuitive user interface with smart navigation and built-in intelligent guided problem solving plus user customizable dashboards providing the flexibility to view data as needed
- Application-centric analysis proving a high level view of the health of the applications on the network with the capability to analyze the performance of the network infrastructure underlying business critical applications (path analysis) to ensure consistent end-user experience
- Guided troubleshooting with automated diagnostics and granular data to solve problems before they escalate



Detailed, fast network discovery for instant visibility of what's out there and where it's connected in minutes

Model	Description	Gold 1YR	Gold 3YR
OPVXG	*OptiView XG – Network Analysis Tablet, 1 Gbps	GLD-OPVXG	GLD3-OPVXG
OPVXG-10G	*OptiView XG – Network Analysis Tablet, 10 Gbps	GLD-OPVXG-10G	GLD3-OPVXG-10G
OPVXG-10G/GLD	*OptiView XG – Network Analysis Tablet, 10 Gbps with 1-Year of Gold Support (available in U.S. only)	Included in Bundle	N/A
OPVXG-PRO	*OptiView XG – Network Analysis Tablet, 1 Gbps, with AirMagnet WiFi Analyzer and Spectrum XT	GLD-OPVXG-PRO	GLD3-OPVXG-PRO
OPVXG-PRO/GLD	*OptiView XG – Network Analysis Tablet, 1 Gbps, with AirMagnet WiFi Analyzer and Spectrum XT with 1-Year of Gold Support (available in U.S. only)	Included in Bundle	N/A
OPVXG-EXPT	*OptiView XG – Network Analysis Tablet, 10 Gbps with AirMagnet WiFi Analyzer and Spectrum XT	GLD-OPVXG-EXPT	GLD3-OPVXG- EXPT
OPVXG-EXPT/GLD	*OptiView XG – Network Analysis Tablet, 10 Gbps with AirMagnet WiFi Analyzer and Spectrum XT with 1-Year of Gold Support (available in U.S.		

* For sale only in countries where the XG wireless is certified



ClearSight[™] Analyzer

Application-centric analysis software that gives quick answers to application performance problems without looking at packets. ClearSight Analyzer (CSA) is a powerful network monitoring and application analysis solution. CSA provides deep network insight and visibility required for today's complex and multi-protocol networks. With support of third-party decode engines, such as Wireshark, CSA can decode about 1,000 protocols.

- Application-centric analysis that automatically analyzes application flows with intuitive drill down to identify the root cause of performance issues
- Real-time application performance monitoring with alarms for problem identification
- Time-based analysis for trace files up to 4 Gigabytes to quickly identify relevant packets for the application-centric view



Model	Description	Gold 1YR	Gold 3YR
CSN/CSA-1000	ClearSight Analyzer Software	GLD-SW-1000	GLD-SW-1000-3YR
CSN/CSA-1000CD	ClearSight Analyzer Software on CD	GLD-SW-1000	GLD-SW-1000-3YR
CSN/CSA-1045	CSA W/IP Multicast/History Rprt/Packet Gen	GLD-SW-1045	N/A
CSN/CSA-1045CD	CSA W/IP Multicast/History Rprt/Packet Gen on CD	GLD-SW-1045	N/A
CSN/0PT-3045	IP Multicast Visualization, Hist Reporter, and Packet Gen for CSA	N/A	N/A



Network Time Machine[™]

All-in-one packet capture appliance for network and application analysis. Visual fault domain isolation, advanced data mining and application-centric analysis reduce troubleshooting time. Single appliance with multiple terabytes of storage and plug-and-play operation cuts deployment and maintenance costs. Independently verified 100% packet capture at rates exceeding 10Gbps.



- Capture traffic on multiple 10/100 Mbps, 1 Gbps and 10 Gbps Ethernet interfaces at rates in excess of 10Gbps (independently verified).
- Plug-and-play operation automatically identifies applications, collects, and displays relevant statistics in user-configurable dashboards
- Innovative Performance Bottleneck Analysis (PBA) visually identifies whether problems are in the server or the network
- Portable and rack mount versions with RAID options and multiple terabytes of storage.

Model	Description	Gold 1YR	Gold 3YR
CSN/NTM-EX3	Network Time Machine Express, Four 1 GB SFP Interfaces, 1 TB storage	GLD-NTM-EX3	N/A
CSN/NTM-ST3-4TB5	Network Time Machine Standard3, Four 1 GB SFP Interfaces, 4 TB storage, SATA GLD-NTM-ST3-4 RAID 5		N/A
CSN/NTM-ST3-8TB5	Network Time Machine Standard3, Four 1 GB SFP Interfaces, 8 TB storage, SATA RAID 5	GLD-NTM-ST3-8TB	N/A
CSN/NTM-ST3-EA	Network Time Machine Standard3, Four 1 GB SFP Interfaces, 20 TB storage, SATA RAID 5	GLD-NTM-ST3-EA	N/A
CSN/NTM-PR3-S5	Network Time Machine Premium3, Two 10 GB XFP Interfaces, 6.1 TB storage SAS RAID 5	GLD-NTM-PR3	GLD3-NTM-PR3
CSN/NTM-P01A	Network Time Machine Portable1A, Four 1 GB SFP Interfaces, 1.4 TB storage	GLD-NTMP01A	N/A
CSN/NTM-P02-1G	Network Time Machine Portable2, Four 1 GB SFP Interfaces, 1.7 TB storage	GLD-NTM-P02-1G	N/A
CSN/NTM-P02-10G	Network Time Machine Portable2, Two 10 GB XFP Interfaces, 1.7 TB storage	GLD-NTM-P02-10G	N/A



Featuring industry-leading innovation and unsurpassed quality, our tap solutions are suitable for numerous IT groups including network operations, network engineering, information security, quality assurance, web analytics and application analysis. Taps are available in numerous configurations to support all network access strategies and objectives. These configurations include inline taps (copper and fiber), inline aggregation taps (non-filter and filtering), span taps (non-filter, filtering and switching) and combination inline/ span taps (single and dual link)

- Copy traffic running through a network and send traffic to analyzers and probes
- Provide permanent ports for network, application and security analysis solutions
- Improve the performance of network, application and security solutions
- Decrease the MTTR thru faster resolution of network, application and security issues
- Increase the ROI of traffic analyzers and probes
- Decrease the reliance on switch and router resources for network traffic visibility
- Highly reliable

Models	Description	Gold 1YR
TAP-100	Inline copper tap 10/100	N/A
TAP-10/100/1000	Inline copper tap 10/100/Gig	N/A
FTAP-50-50-10G	Inline fiber tap, 50 multimode, 10 Gig	N/A
FTAP-9-50-10G	Inline fiber tap, singlemode, 10 Gig	N/A
ATAP-100	Inline copper aggregating tap 10/100	N/A
AXTAP1204BT-BT	Inline/SPAN copper aggregating tap with 2 any-to-any ports (2 BT)	GLD-AXTAP1204BTBT
AXTAP1204BT-SFP	Inline/SPAN copper aggregating tap with 2 any-to-any ports (2 SFP)	GLD-AXTAP1204BTSFP
AXTAP1210BT-BT/SFP	Inline/SPAN copper aggregating tap and 8 any-to-any ports (6 BT & 2 SFP)	GLD-AXT1210BTBTSFP
AXTAP2206BT-BT	Dual link inline/SPAN copper aggregating tap with 2 any-to-any ports (2 BT)	GLD-AXTAP2206BTBT
AXTAP2210BT-BT/SFP	Dual link inline/SPAN copper aggregating tap with 6 any-to-any ports (4 BT & 2 SFP)	GLD-AXT2210BTBTSFP
AXSTAP-4SFP	SPAN aggregation tap with 4 any-to-any ports (4SFP)	GLD-AXSTAP-4SFP
AXSTAP-10SFP	SPAN aggregation tap with 10 any-to-any ports (10SFP)	GLD-AXSTAP-10SFP

Other models available for different media, higher speeds, number of ports and need for filtering.

Accessories	
TAP-RMK-2	1U, 2Bay rack mount kit
TAP-RMK-3	1U, 3Bay rack mount kit
TAP-RMK-14	4U, 14Bay rack mount kit
MS-SX	SX Gigabit fiber SFP transceiver
MS-LX	LX Gigabit fiber SFP transceiver
SFP-RJ45	10/100/Gig copper SFP transceiver

Telecommunications Providers

Telephone Butt-In Test Sets

Telephone Test Set Comparison	49
TS®52 PRO LCD Test Set	50
TS®40 Series Test Sets	51
TS®30 Test Set	51
TS®22 Series Test Sets	52
TS®25D LCD Test Set	52
TS®19 Test Set	53
Modular Adapters	53
Line Cords and Clips	54

Access Network Test Equipment

Fiber OneShot™ Optical Test Set
MetroScope [™] Service Provider Assistant
LinkRunner [™] Duo CE Pocket Carrier Ethernet Test Set 58
CopperPro™ Series II Broadband Loop Tester
990DSL CopperPro [™] Loop Tester
CopperPro Terminator™ Far End
Terminating Device 60
635 QuickBERT-T1 Test Set 61
Voltage Detector

TELEPHONE BUTT-IN TEST SETS

Complete line of analog butt-in telephone test sets provides the view you need to ensure telecommunications services

Fluke Networks offers the most comprehensive line of telephone test sets to meet the voice and data demands of telecommunications technicians. Our DropSafe[™] reliability and RainSafe[™] protection ensure maximum ruggedness, even in the most extreme conditions. Our DataSafe[™] technology is vital in preventing interruption of existing data traffic, and our DSL/POTS filtering technology goes one step further to allow testing on the POTS side of a line even while data is present.

We continually improve our line of butt-in test sets to ensure technicians have the right features to match their application needs – with the most flexible options for every budget.

	TS®52 PRO	TS®44 PRO	TS®42DLX	TS®22A	TS®22	TS®25D	TS®30 / TS®120*	TS®19
Display – back lit LCD and glow-in-the-the dark keypad	1					LCD only		
Extended range high- impedance DataSafe operation in monitor mode	~	~	1			✓		
High-impedance DataSafe operation in monitor mode	~	\checkmark	\checkmark	1		1	\checkmark	~
Data lockout protection	1	1				~		
Data lockout override	1	1				~		
DSL/POTS filtering technology	1	1	1			~		
Low/high voltage indication	1	1	1			~		
Low current (mA) indication	1	1	~			1		
Over voltage protection	1	1	1	~	1	1	1	
Over current protection	1	1	1	1	1	1	1	
Two-way speakerphone for true hands-free conversations	1	1	1	1				
One-way amplified speaker for hands-free monitoring	1	~	~	1	1	~		
Audible ringer for callbacks	1	1	\checkmark	\checkmark	~	1	1	\checkmark
Waterproof – exceeds American Military Spec. MIL-STD-810E	~	~	\checkmark					
RainSafe – safe in severe weather conditions	~	~	~	1	1		1	
DropSafe – passes 20 foot (6 meter) drop test onto concrete	1	\checkmark	\checkmark	\checkmark	√		1	
Meets Bellcore specifications	1	1	~	1	1		~	
Tone and pulse operation	1	1	~	1	1	1	1	1
Polarity indication in talk mode	1	1	1	1	1	1	1	~
PBX pause button	1	~	~	1	1	1		
Stores nine 18-digit numbers in repertory dialer (speed dialing)	1	1	\checkmark	1	1	1		
Replaceable 9V battery for powering speaker	1	<i>√</i>	\checkmark	1	1	1		

* TS120 for outside North America only. 67/33 break/make ratio.



TS°52 PRO LCD Test Set

The TS®52 PRO Test Set features the latest in test set technology. Designed with a superior, radiant liquid crystal display (LCD) user interface, it allows you to see what cannot be heard in any outside plant environment. The back-lit LCD and glow-in-the-dark keypad brings light to even the darkest of work environments, providing perfect line diagnostic clarity. The TS®52 PRO Test Set is also equipped with 2-way speakerphone and DataSafe[™] Pro data protection technology featuring superior high-impedance monitoring, data lockout and lockout override, making you completely safe.

- Display back-lit LCD and glow-in-the-the dark keypad
- **DataSafe™ Pro** superior high-impedance monitoring, lockout and override, making you completely safe in any mode
- **DropSafe™/RainSafe™** passes 20-foot drop test and designed for use in rainy conditions
- DSL/POTS filtering technology allows technicians to clip on a live DSL line to test POTS service without downing or disrupting data service
- Two-way, hands-free speakerphone for true hands-free conversation
- Test Functions:
 - Data indication: warns when data is present.
 - Voltage indication: troubleshooting feature to identify potential line problems
 - Current (mA) indication: verifies sufficient line current
 - Caller-ID: verifies service is functional
 - DTMF digit grabbing: isolate faulty customer premise equipment

Model	Description
52801001	TS52 PRO test set with piercing pin clips
52801004	TS52 PRO test set with 346A plug
52801009	TS52 PRO test set with ABN/PP clips
52801RJ9	TS52 PRO test set with ABN/PP and RJ-11 plug

Telephone/Data Room or Central Office



Cross Box or Serving Terminal Inside or Outside the Customer Premise



www.electrolux.mk www.uteco.mk





TS°40 Series Test Sets

Built for the demanding professional, the TS40 Series test sets combine an ergonomic waterproof design, DropSafe[™] durability and a standard 3-year warranty for unmatched reliability. The TS40 Series test sets offer speakerphone capability for true hands-free conversations, a rugged ergonomically designed waterproof case that exceeds American Military Specification MIL-STD-810E and are DropSafe tested to 20 feet onto concrete. Designed with superior highimpedance monitor to protect data lines, the TS40 Series offers the best DataSafe[™] protection in its class. Advanced testing functions for low/high voltage and low (mA) current detection are displayed in easy-to-read LEDs. Always-on monitor mode simplifies operation and speeds

testing; just clip on to the pair and it is monitoring.

- DataSafe operation with superior high impedance monitor
- Advanced testing functions for low/high voltage and low (mA) current
- Always-on Monitor Mode
- Ergonomic DropSafe case
- High fidelity, 2-way speakerphone for true hands-free conversations.
- TS®44 PRO includes Data Lockout, Lockout Override and DSL/POTS filtering

Model	Description
50801001	TS44 PRO test set with piercing pin clips
50801004	TS44 PRO test set with 346A plug
50801009	TS44 PRO test set with ABN/PP
50801RJ9	TS44 PRO test set with ABN/PP and RJ-11 plug
42801001	TS42 DLX test set with piercing pin clips
42801004	TS42 DLX test set with 346A plug
42801009	TS42 DLX test set with ABN



TS°30 Test Set

The TS30 test set features the latest in test set case design, at an affordable price. The ergonomic non-slip grip handle provides improved handling of the set in all weather conditions. Includes DataSafe™ operation so technicians can clip onto a line in monitor mode, without disrupting existing data traffic.

- High impedance DataSafe operation in monitor mode
- DropSafe[™] reliability passes 20-foot drop test
- RainSafe[™] protection in severe weather conditions
- Mute switch
- Last number redial

Model	Description
30800009	TS30 test set with ABN
30800001	TS30 test set with piercing pin clips



TS®22 Series Test Sets

The TS22 Series offers a unique built-in, one-way amplified speaker that provides three audio levels for hands-free listening and use with automated voice response systems. Multiple memories enable storage of nine 18-digit telephone numbers in repertory dialer (speed dialing) for easy access to test boards, the central office and other frequently called numbers. The last number redial feature eliminates the need to re-key your last entry. The TS22 test set offers an unbeatable combination of reliability, durability and expanded utility.

- TS22 test set has an amplified speaker for hands-free monitoring
- TS22A test set has a two-way speakerphone for true hands-free conversation
- DropSafe[™] reliability passes 20-foot drop test
- RainSafe[™] protection in severe weather conditions
- Stores nine 18-digit numbers in repertory dialer (speed dialing)

Model	Description
22801009	TS22A test set with ABN
22801007	TS22A test set with ground start cord
22801004	TS22A test set with 346A plug
22801001	TS22A test set with piercing pin clips
22800009	TS22 test set with ABN
22800007	TS22 test set with ground start cord
22800004	TS22 test set with 346A plug
22800001	TS22 test set with piercing pin clips



TS°25D LCD Test Set

The TS25D test set features data lockout and lockout override, making you completely safe in talk or monitor mode. The DSL/POTS filtering technology allows you to safely draw dial tone without downing DSL. A built-in analog tone generator simplifies wire identification with a probe. An amplified speaker makes monitoring the line hands-free, so you can keep working. The Talk Battery function provides voltage to carry voice conversation on non-powered pairs. Also includes Caller-ID and Call-waiting Caller-ID functions. All in a compact unit with an oversized, robust liquid crystal display (LCD) that makes the intuitive, common-sense menus easy-to-read and use.

- Caller-ID and Call-waiting Caller-ID
- Amplified speakers for hands-free monitoring
- Data lockout and data lockout override
- Tone generator for wire identification
- Talk battery to power voice conversation on dry (non-powered) lines



Model	Description	
25501109	TS25D test set with ABN kit (includes pouch and earpiece)	
25501009	TS25D test set with ABN	
25501004	TS25D test set with 346A plug	
25500400	TS25D pouch only	
25500300	TS25D battery door with belt clip	



TS°19 Test Set

The TS19 test set combines all the essential test set features at an affordable price. This test set was specifically designed for in-house telecom technicians. Its high impedance monitor prevents accidental disruption of service from clipping onto a data line while in Monitor Mode, thus ensuring the integrity of critical data lines. Features such as tone (DTMF) or pulse operation, talk/monitor capabilities, polarity test button and last number redial make this test set the perfect combination of features and price.

- High impedance DataSafe™ operation in monitor mode
- Tone (DTMF) and pulse operation and last number redial
- Polarity indication in talk mode

Model	Description
19800009	TS19 test set with ABN
19800003	TS19 test set with banana jacks to alligator clips

To learn more visit: www.flukenetworks.com/ts19

In-line Modular Adapter (4, 6, and 8-wire)

In-line banjo modular adapters permit testing on working lines without disrupting service. Quickly determine whether the trouble is in the phone or in the line.

- Easily complete testing and obtain circuit access on working lines without disrupting service
- Clear circuit markings on the sides and bottom of the unit
- Test line status with the 4-wire modular adapter

4-wire Standard Modular Adapter

Provide a quick connect to modular telephone jacks using any standard butt-in test set equipped with spring clips.

- Easily complete testing and obtain circuit access on working lines without disrupting service
- Clear circuit markings on the sides and bottom of the unit
- Test line status with the 4-wire modular adapter

Spare Modular Adapter Cords (standard and K-plugs)

In-line banjo modular adapters feature replaceable adapter cords which enable broken jack clips to be replaced without discarding the entire unit. K-plug versions have rugged jack clips.

Model	Description
10113000	4-wire modular adapter
10210100	4-wire in-line modular adapter
10210101	4-wire in-line modular adapter with K-plug
10220100	6-wire in-line modular adapter
10220101	6-wire in-line modular adapter with K-plug
10230100	8-wire in-line modular adapter
10230101	8-wire in-line modular adapter with K-plug



www.electrolux.mk www.uteco.mk

Line Cords and Clips

Line Cords and		r			1
P4480009	P4480001	P4480004	P4480RJ9	P3218024	P3218028
Line cord with Angled Bed-of-Nails Clips	Line cord with Angled Piercing Pin Clips	Line cord with 346A plug (Central Office)	Line cord with Bed- of-Nails and RJ-11 plug	Line cord with Straight Bed-of-Nails Clips	Line cord with Angled Piercing Pin Clips
Compatible with 52 & 40 Series	Compatible with 52 & 40 Series	Compatible with 52 & 40 Series	Compatible with 52 & 40 Series	Compatible with 20 Series	Compatible with 20 Series
P3218231	P3218232	P3218234	P3080009	P1980001	P1980003
Line cord with Boots, no Clips	Line cord with 346A Plug (Central Office)	Line cord with Angled Bed-of-Nails Clips	Line cord with Angled Bed-of-Nails Clips	Line cord with Angled Piercing Pin Clips	Line cord with Banana Jacks and Alligator Clips
Compatible with 20 Series	Compatible with 20 Series	Compatible with 20 Series	Compatible with 30 Series	Compatible with 19 Series	Compatible with 19 Series
		and a second	S,		
P1980007	P1980009	P3218124	P3218RJ9	P3218442	P2280062
Line cord with Ground Start cord	Line cord with Angled Bed-of- Nails Clips	Line cord 471 A Plug with RJ-11 Plug	Line cord with Angled Bed-of-Nails Clips and RJ-11 plug	Line cord 471A Plug with Angled Piercing Pin Clips	Ground start cord
Compatible with 19 Series	Compatible with 19 Series	Compatible with all, requires 346A Plug	Compatible with the TS20 Series	Compatible with all, requires 346A Plug	Component for P1980007
	P			Line cord boot only P3218-418 Black Boot P3218-420 Red Boots	
P3218202	P4080248	P4080249	P3218249		
Angled Bed-of- Nails, Pkg. 1 each	Standard locking belt clip	Belt clip	Belt clip		
Compatible with all	Compatible with 52 & 40 series	Compatible with 52 & 40 series	Compatible with 19, 20, 30 series		

ACCESS NETWORK TEST EQUIPMENT

Complete line of access network test sets for the successful installation and troubleshooting of carrier Ethernet, xDSL and special services

Effective installation and maintenance solutions are essential to keep customers happy and technicians productive. Award-winning field test products earned their reputation where it matters most: on the job.

We offer test and troubleshooting solutions that address a wide range of technologies and applications, from POTS to carrier Ethernet, xDSL to IP, and more. Whether it's validating service level agreements (SLAs) for carrier-class Ethernet services, qualifying and deploying ADSL2/2+ or VDSL services, isolating cable faults, eliminating noise problems, or stress testing circuits prior to service installation, Fluke Networks powerful tools help technicians get to the solution fast.

www.electrolux.mk www.uteco.mk



Fiber OneShot[™] Optical Test Set

Fiber OneShot is a pocket-sized optical test set designed to take the complexity out of singlemode fiber testing. Fiber OneShot's one-button-test capability will quickly and accurately verify if a fiber is active and find the distance to a break or end, dirty end face or reflective event – going from zero to 9,999 feet (0 - 6,000 meters displayed in metric mode).

Testing benefits increase your productivity:

- Measure the length of your fiber quickly and accurately
- New CheckActive[™] feature alerts you if an optical signal is on the fiber
- Instant on no boot/load time
- One-button testing expedite your fiber testing with one button in just a few seconds
- Locate fiber faults at one meter
- Test results displayed numerically no interpretation needed



Model	Description
FIBR-1-KIT	Fiber OneShot™ Optical Test Set, SC adapter, UPC-APC, UPC-UPC 1-meter launch cords, holster, case, 22 language-QRC on CD, manual and batteries
FIBR-1-SHOT	Fiber OneShot™ Optical Test Set, SC adapter, holster, 22 language-QRC on CD, manual and batteries
FIBR-1-KIT-VF	Fiber OneShot [™] Optical Test Set, SC adapter, UPC-APC, UPC-UPC 1-meter launch cords, holster, case, 22-QRC on CD, manual, batteries + VisiFault [™] Visual Fault Locator with 2.5mm universal adapter
FIBR-1-KIT-PM	Fiber OneShot [™] Optical Test Set, SC adapter, UPC-APC, UPC-UPC 1-meter launch cords, holster, case, 22-QRC on CD, manual, batteries + SimpliFiber [®] Pro Optical Power Meter; SC adapter included
FIBR-1-KIT-VFPM	Fiber OneShot [™] Optical Test Set, SC adapter, UPC-APC, UPC-UPC 1-meter launch cords, holster, case, 22-QRC on CD, manual, batteries + VisiFault [™] Visual Fault Locator with 2.



MetroScope[™] Service Provider Assistant

MetroScope Service Provider Assistant is the next generation in field test equipment for installing and troubleshooting carrier Ethernet services (10/100/Gig) over copper or fiber. The new ProVision™ test is the fastest, easiest and most comprehensive way to test new circuits. Generate performance reports using ProVision, RFC 2544 or BERT tests. The unique Reflector accessory allows end-to-end testing without a second MetroScope, saving up to 40%. Fluke Networks IP expertise puts unmatched troubleshooting for wired or wireless networks behind a deceptively simple user interface. Full VGA color display with web remote control and a built-in VoIP phone.

- Low-cost reflector tests links using a single MetroScope
- Easy to use with large VGA color touchscreen
- VoIP phone and metrics
- In-depth traffic monitoring and active network discovery
- Remote control via web browser
- Application performance testing
- 802.11a/b/g wireless Ttesting



Model	Description	Gold 1YR
MTSCOPE-KIT	Includes MetroScope mainframe with 10/100/1000BASE-T and 1000BASE-X SFP Port, recharge- able Li-Ion battery pack , AC adapter/battery charger, auto lighter charger, remote wiremap adapter, 128MB compact-flash card, documentation CD, carrying case & LinkReflector including 10/100/1000BASE-T port	GLD-MTSCOPE
MTSCOPE	Includes 10/100/1000BASE-T and 1000BASE-X SFP Port,AC adapter/battery charger, remote wiremap adapter, 128MB compact-flash card, documentation CD, carrying case.	GLD-MTSCOPE
MTSCOPE-LT	MetroScope Mainframe without Advanced Network Analysis Features and without multi-stream capability – includes 10/100/1000BASE-T and 1000BASE-X SFP Port, AC adapter/battery charger, remote wiremap adapter, 128MB compact-flash card, Documentation CD, carrying case	GLD-MTSCOPE
LRDUO-CE	LinkRunner™ Duo CE for Carrier Ethernet	GLD-LR
Options		
MS-VOIP	VoIP Phone and Analysis for MetroScope (all models)	
MS-WLAN-OPT	Fluke Networks 802.11/a/b/g PCMCIA WLAN radio card, directional antenna, instructions to active Option, printed English language Getting Started Guide and CD containing multi-language user museful files	
MS-MULTI-LT	Multistream option for MetroScope-LT	
Accessories		
DTX-ACUN	AC charger, universal	
OPVS-KB	Mini USB keyboard	
944806	Null modem cable (DB9)	
ES-BATTERY	Replacement battery	
ES2-ZX	1000BASE-ZX Gig Fiber DDM SFP transceiver (1550nm DFP laser)	
MS-SX	SX Gig Fiber DDM SFP transceiver	
MS-LX	LX Gig Fiber DDM SFP transceiver	
MS-100FX	100BASE-FX Fiber SFP transceiver (without DDM)	
LRPRO-LION	Lithium-Ion battery pack for LinkRunner Pro with AC adapter	
MS-BAG	Large carrying case for MetroScope and accessories	

www.electrolux.mk www.uteco.mk



LinkRunner[™] Duo CE Pocket Carrier Ethernet Test Set

If you're installing carrier Ethernet, you've been forced to choose between thorough testing with a dedicated performance test set or plugging it in and hoping for the best. The LinkRunner Duo CE Pocket Carrier Ethernet Test Set reduces your costs and increases customer satisfaction. It's designed to help technicians quickly turn up and troubleshoot carrier Ethernet, and, it works with your existing performance testers when you need more complete testing.

LinkRunner Duo CE Features:

- Link Verification of Fiber and Copper Circuits at 10/100/1000MBps quickly determine if the circuit is up or not
- **Performance Testing with MetroScope and other Popular Test Sets** use as a remote device for ProVision[™], RFC 2544 and other performance tests with testers from Fluke Networks, JDSU, Sunrise, Exfo and more
- Layer 1, 2, and 3 Loopback configurable loopback to filter frame type and swap MAC and/or IP addresses. Manual or DHCP IP configuration
- Fiber Power Measurements make sure that the incoming signal meets requirements
- PING Testing measure availability and response performance for key devices or URLs
- VLAN Verification configurable VLAN and priority settings
- **Designed for the Field** small, lightweight and rugged.
- Document Results save link and ping test results and upload to a PC through the USB port
- **CPE Testing** pinpoint problems on the customer side with port identification and 802.1x testing, cable and connectivity tests.

Model	Description	Gold 1YR
LR-DUO-CE	LinkRunner Duo Carrier Ethernet Tester	GLD-LR
WIREVIEW 1	Wiremap Adapter	N/A
Wireview2-6	Wireview Cable IDs #2-6	N/A
MS-AUTO-CHG 12V	Car Charger for LinkRunner Duo	N/A
ES2-ZX	ZX DDM SFP	N/A
MS-SX	SX DDM SFP	N/A
MS-LX	LX DDM SFP	N/A





CopperPro[™] Series II Broadband Loop Tester

The CopperPro Series II is the complete test set for qualifying your local loop for ADSL, ADSL2/2+, VDSL and special services. It packs all the test, analysis and troubleshooting capabilities an OSP technician needs into one integrated, handheld tool. New features include broadband noise identification for VDSL, advanced TDR capabilities for locating short bridge taps and other VDSL-affecting impairments, and an optional ADSLx and VDSL modems for verifying service connectivity and performance. Rugged construction and easy-to-use features give your technicians the ability build, repair, install, and maintain OSP systems more efficiently with fewer repeats.

- Quickly qualify the facilities for DSL services including ADSL, VDSL, HDSL, T1 and other special services
- Easily identify and locate possible problems to ensure reliable performance
- Install new services efficiently with fewer call-backs
- Verify connectivity and network performance to ensure that next-generation services perform up to your customers' expectations

Model	Description
990DSL2+	CopperPro Next Gen Copper Loop Analyzer w/TDR & wideband spectral analysis for ADSL2+
990VDSL	CopperPro Next Gen Copper Loop Analyzer w/TDR & wideband spectral analysis for VDSL
990TL-SB/RF	RF Test lead set for 990DSL2+ or 990VDSL with spike+bed-of-nails piercing clips
990LT	990LT CopperPro™ Test Set – Next-generation loop analyzer (basic)
990LT/TDR	TDR option for the 990LT CopperPro™ Test Set
990LT/DSL	DSL option (2.2 MHz) for the 990LT CopperPro™ Test Set
990LT/VDSL	VDSL option (17.7 MHz) for the 990LT CopperPro™ Test Set with DSL option installed
990-GM/2	



990DSL CopperPro[™] Loop Tester

The CopperPro loop tester offers a broad range of Plain Old Telephone Services (POTS) troubleshooting, fault location and line qualification capabilities in an affordable package. Its Wideband/TDR option adds high-frequency transmission testing and qualification functions for services like ADSL, HDSL and HDSL2, ISDN, T1, E1 and DDS. And the TDR option adds precise fault location and analysis. CopperPro is packed with test, analysis and troubleshooting capabilities integrated with an easy-to-use toolbox interface that makes identifying and locating faults as simple as pushing a button.

- Replaces up to 12 traditional test sets
- Troubleshoots and qualifies lines for POTS, ADSL and other special services
- Time Domain Reflectometer (TDR) feature allows precision fault locations

Model	Description	Gold 1YR
990 DSL	CopperPro Loop tester	GLD-990DSL
990DSLWT	Loop tester with wideband and TDR	N/A
990TL-SB	Test lead set (Spike and bed-of-nails)	N/A
990-CASE	Deluxe transport bag	N/A



CopperPro Terminator[™] Far End Terminating Device

The CopperPro family of loop testers packs a full complement of test and troubleshooting capabilities into one rugged, integrated tool for OSP technicians. You can expand those capabilities even further with Terminator – an accessory module to the 990DSL CopperPro that lets you perform terminated transmission testing quickly, easily, single-handedly. Together, the CopperPro and Terminator are a major advance in qualifying and troubleshooting copper access network circuits, including HDSL2/4. Nothing else on the market offers a more complete and effective solution for reducing failure frequency, repeats, and chronic problems with special services circuits.

- Perform terminated transmission testing quickly, easily, single-handedly
- Optimize your workforce with "one tech out" terminated testing of out-of-service pairs
- High-speed acceptance/qualification tests, including loop attenuation a must for HDSL2/4
- Robust error checking eliminates time-consuming false starts and assures reliable communication with the 990DSL CopperPro test set
- Sweep thousands of frequencies in seconds

Model	Description
TN2100	Enhanced Terminator far end device
TN-LEADS-B	Test lead set, bed-of-nail clip



635 QuickBERT-T1 Test Set

Compact, handheld T1 test set for construction, installation and troubleshooting applications. Instantaneous detection and display of framing, line coding, errors, alarms, level, frequency and more. In a single 4 lb (1.8 kg) package, the 635 includes all the basic T1 testing capabilities you would expect in a larger and more expensive tester. It performs bit-error tests, detects framing type, line coding and bit pattern, and displays signal level, frequency, clock slips, errors and alarms. The 635 transmits the most commonly used loop codes, including HDSL. Full, unframed and fractional (56k and 64k) T1 are supported, along with display of signaling and data bits and capture of DTMF digits. Plus, individual voice channels may be monitored on the built-in speaker or over a headset.

- Instantaneous detection and display of framing, line coding, errors, alarms, level, frequency and more
- Transmits and receives common Bit Error Rate Test (BERT) patterns and includes all common loop codes
- Compact, rugged and easy-to-use

Model	Description
635	QuickBERT-T1, carrying case, ToolPak™ hanging accessory, and necessary cables and adapters
633/635-Kit	2 Bantam-to-310 cables, 2 Bantam-to-alligator clip cables, 1 Bantam-to-RJ-48 cable
635-1	635 QuickBERT-T1 and cable kit



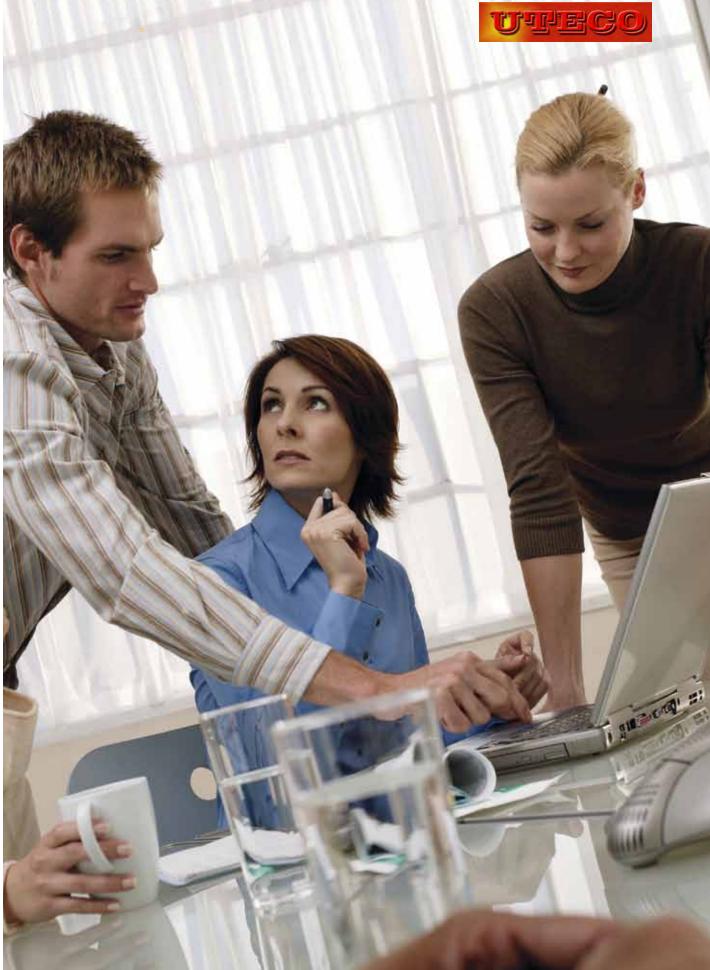
Voltage Detector

In just a few seconds, a technician can determine if it's safe to work around areas such as transformer cases and circuit breaker housings, power ground wires or newly-driven ground rods, mobile homes, metallic siding or metal framing, pedestals, cross boxes or conduit, street light fixtures or electrical machinery. The Voltage Detector is a proven life-saver, with more than 30 years of service in telecommunications outside plant and power utility applications.

- Helps protect against accidental electrocution
- Is fast and easy-to-use. Handy as a flashlight
- Rated to 20,000 Vac and 2,000 Vdc

Model	Description
C9970	Voltage Detector
C9973	Voltage Detector kit – includes Voltage Detector, probe cap, storage bag, temporary bond, ground cord and handbook
C9974	Voltage Detector kit with test plug

CORPORATE



www.electrolux.mk www.uteco.mk

www.electrolux.mk www.uteco.mk •

•

.

.

.

.

.

•



OptiFiber[®] Pro

- Effectively tests data center fiber
- Troubleshoots data center fiber links
- Maximizes efficiency with a smartphone interface
- Identifies faults on singlemode or multimode fiber

More on page 18



LinkRunner[™] AT

- Identifies network problems in seconds
- Instantly verifies link status, connection type, signal strength and traffic
- Quickly validates PoE performance
- IPv4/IPv6 ready

More on page 37



Fiber QuickMap[™]

- One-button testing with no user setup
- Six-second testing time on multimode fiber
- Various kit configurations to meet your needs

More on page 25



Pocket Toner[®]

- Connects to any voice, data or video cable
- Detects open/short circuits, continuity, AC/DC voltage and dial tone
- Protects up to 52 volts

More on page 13

