Network SuperVision™ Solutions Catalog 2009

*Products for the installation, testing, monitoring and analysis of enterprise and telecommunication networks*

FLUKE networks

▶▶ Online Resources

Fluke Networks is committed to helping you get the most value out of our Network SuperVision products and find the solutions you need. We encourage you to visit **www.flukenetworks.com** where you will find additional in-depth and up-to-date product information for our complete product offering – some of which isn't represented in this catalog. Product sections are deep in technical content including manuals, datasheets and application notes. Our detailed knowledge base gives you answers to virtually every question. And we offer frequently updated software downloads and firmware updates to keep your tools in cutting-edge condition.

Also look to FlukeNetworks.com for value added content pages that resonate with your job function, technology interest, and content needs.
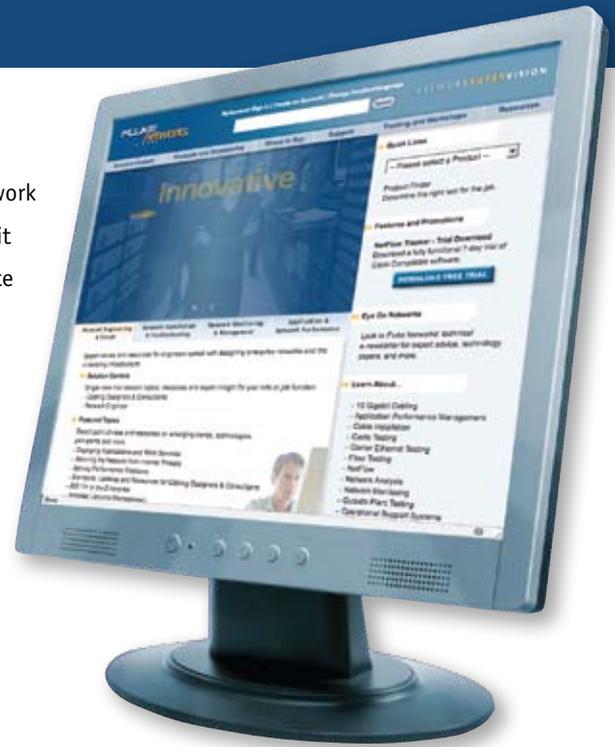
Solution Centers

Find the Solution Center that resonates with your role or job responsibilities as a networking professional for a single view into relevant topics, resources and expert insight. Examples:

- Cable Installation Technician
- Ethernet in an Industrial Environment
- Managing, Monitoring and Troubleshooting Application Performance
- Network Engineer and Network Technician
- Service Provider Technician

Learn About

Learn definitions, applications and key considerations of core networking technologies Fluke Networks' experts know best along with related products and resources. Examples:

- 10 Gigabit Cabling
- Carrier Ethernet Testing
- OTDR
- NetFlow
- VoIP
- Wireless LANs

Featured Topics

Get expert insight and deep technical content on technology trends, issues and pain points to help you solve everyday problems and plan for tomorrow's needs. Examples:

- Testing 10 Gig Ethernet over Copper and Fiber Cabling
- 802.11 in the Enterprise
- Managing Planned Changes and Unexpected Events
- LAN Installation and Validation

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Contact us:

For more information about our Network SuperVision Solutions, call **1-800-283-5853** (US/Canada) or **425-446-4519** (other locations) or email **info@flukenetworks.com**

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Fluke Networks operates in more than 50 countries worldwide. To find your local office contact details, go to **www.flukenetworks.com/contact**

Welcome to Fluke Networks' 2009 Network SuperVision Solutions product catalog, the definitive resource for information on Fluke Networks' industry-leading solutions for installing, testing, monitoring, and analyzing enterprise and telecommunications networks. We strive to give you an unparalleled view into your ongoing challenges of building and maintaining mission-critical network and telecommunication services. We offer easy-to-use tools that save you precious time and money while improving the productivity of your organization.

You know that the right tool makes the job go faster and easier. Each of our tools, from simple cable strippers and knives to cable analyzers to enterprise level analysis tools, meet and exceed industry standards, giving you confidence that you and your team of professionals will achieve your goals the first time and every time. Please review our catalog for opportunities to enhance your solution set and get ready to reap the benefits of the latest advances from Fluke Networks.

▶▶ Only Fluke Networks Delivers Network SuperVision

Unique vision into your enterprise or telecommunication network – helping you meet today's technology challenges and anticipate tomorrow's.

Fluke Networks strives to deliver Network SuperVision™ in every product, solution, service and point of contact. It's the superior vision you get when you look at your network using our award winning solutions: portable network testers and analyzers, enterprise performance management hardware and software, datacom installation tools or telecommunications instruments and systems. It's the instant visibility you need to solve everyday network problems, and it offers the foresight required to improve network performance into the future. All through unique vision into your network you can't get anywhere else.

▶▶ Technical Assistance

Have a question? Need help troubleshooting a technical issue? Looking for knowledgeable advice on which Fluke Networks solutions best meet your network analysis needs? The certified support technicians at our Technical Assistance Center are available to help you, call 1-800-283-5853.

▶▶ Network SuperVision Gold Support Programs

Fluke Networks Gold membership programs ensure a high return on your investment by keeping your Fluke Networks products up to date and in top condition. The programs are paid annual service contracts that include the following general benefits: 24/7 technical support, knowledge base access, members-only discounts, access to online training, and up-to-the-minute information on your product; everything you need to reduce your total cost of ownership. Turn to page 61 for a complete overview of Gold Support.

Datacom Cabling

Datacom Cabling

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.

▸▸ Copper Cable Test Solutions Product Comparison

	DTX CableAnalyzer™ Series	CableIQ™ Qualification Tester	MicroScanner[2]	MicroMapper™ Pro
Supports structured cabling warranties	•			
Meets TIA/ISO certification standards requirements	Level IV			
Provides pass/fail results	9-second Cat 6			
Documents test results	•	•		
Qualifies cabling speed (10/100/VoIP/Gig)		•		
Advanced troubleshooting: NEXT, ELFEXT, RL	•			
Troubleshoots distance to connection fault	•	•		
Basic troubleshooting: distance to break or short	•	•	•	
Continuity and wiremap	•	•	•	•

Copper Cable Test Solutions

▶▶ **DTX CableAnalyzer™ Series**

Fluke Networks' DTX CableAnalyzer Series combines speed and unprecedented accuracy no other certification tester can match. This revolutionary platform significantly reduces total time to certify: saving time you can see on your bottom line – as much as 33% of certification costs per year. Certify a Cat 6 link three times faster than other testers with 9-second Cat 6 autotest and level IV accuracy. DTX also gives you 900 MHz of testing bandwidth, optional on-board fiber modules, easy-to-understand diagnostics, 12-hour battery life, a bright color display, and nearly instant setup and reporting. AC Wiremap verifies cabling through Midspan PoE controllers. DTX: It's all about time!

- Exceeds the field tester retirements for Level lle (Cat 5e), Level lll (Cat 6), Level llle (Cat 6a) and Level IV (Cat 7 and Cat 7a)
- Three times faster with 9-second Cat 6 autotest
- Advanced time-saving diagnostics pinpoint fault and suggest corrective actions
- 900 MHz future-proofs your investment for future applications such as 10 Gigabit Ethernet, Class FA and CATV
- Resident fiber modules let you switch between copper and fiber with the push of a button
- Fast, reliable, and rugged with extended 12-hour battery life and color display all enhance user productivity
- All models can be upgraded to the high-end performance model
- DTX significantly reduces total certification costs by as much as 33% a year

Model	Description
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
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
DTX-LT	Excellent performance in an entry-level model – test capabilities up to 350 MHz, and impressive Cat 6 Autotest in 30 seconds*
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
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
DTX-GFM2	DTX Gigabit Multimode Fiber Modules includes a set of two modules for main and Smart Remote, 850 nm VCSEL source and 1310 nm laser source combined into a single output port, 850/1300/1310/1550 nm power meter and integrated VFL
DTX-1800-M	DTX-1800 with Multimode Fiber Modules includes DTX-1800 CableAnalyzer and a set of DTX-MFM2 Multimode Fiber Modules
DTX-1800-MS	DTX-1800 with Multimode and Singlemode Fiber Module includes DTX-1800 CableAnalyzer and set of DTX-MFM2 Multimode Fiber Modules and DTX-SFM2 Singlemode Fiber Modules
DTX-1800-MO	DTX-1800 with Multimode Fiber Modules and OTDR includes DTX-1800 CableAnalyzer, set of Multimode DTX MFM2 Fiber Modules, and a DTX Compact OTDR Module
DTX-1800-MSO	DTX 1800 Copper/Fiber/OTDR Kit includes DTX-1800 CableAnalyzer, sets of Multimode DTX MFM2 and Singlemode DTX SFM2 Fiber (loss/length) Modules, DTX Compact OTDR Module, launch fibers, accessories and carrying case(s)
DTX-NSM	DTX Network Service Module includes one module to verify connectivity, network service and PoE
DTX-1800SR	DTX-1800 Smart Remote add-on
DTX-1200SR	DTX-1200 Smart Remote add-on
DTX-LT/SR	DTX-LT Smart Remote add-on*

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

▸▸ DTX 10 Gig over Copper Test Solution

The DTX-10GKIT, together with DTX-1800, is the only standards-compliant, field-testable certification solution that guarantees cabling plant will support 10G-BASE-T. DTX measures the performance for 10 Gig and Alien Crosstalk (ANEXT and AFEXT) in full compliance with the industry standards to 500 MHz.

- DTX-10GKIT used with DTX-1800 is the only solution that is fully compliant with industry standards
- Measures performance for 10 Gig and Alien Crosstalk (ANEXT and AFEXT) in full compliance with the industry standards
- Simplifies complex Alien Crosstalk link-to-link certification by using the user-friendly and intuitive DTX interface
- The only solution to identify problematic cable(s) within a bundle due to link-to-link crosstalk

Model	Description
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
DTX-AXKIT	Alien Crosstalk Communication Modules (set of two) and AxTalk Analyzer™ Software
DTX-PLA002S	Cat 6A/Class EA Permanent Link Adapter – set of two
DTX-CHA001AS	Cat 6/Class E Channel Adapters (AXTalk) – set of two
DTX-AXTERM	Alien Crosstalk Link Terminators

▸▸ DTX Compact OTDR Module

The DTX Compact OTDR is a full featured Optical Time Domain Reflectometer (OTDR) module that snaps onto the Fluke Networks DTX CableAnalyzer. It makes the DTX a complete, easy-to-use OTDR that shoots and analyzes traces on singlemode and multimode fiber.

The DTX Compact OTDR module makes every technician a fiber expert with unparalleled ease of use, automatic OTDR settings, loss limits for events and fiber links, launch fiber compensation, automatic event analysis, and results management – all with the familiar user interface of the DTX CableAnalyzer.
For more information about fiber options, see page 20.

Model	Description
DTX-OTDR-QMOD	DTX Compact OTDR Module: Includes 850/1300/1310/1550 OTDR Module and carrying case

▸▸ DTX Series Network Service Module

Certify cabling, verify IP service availability, verify link connectivity and document in one consolidated report. Documenting these results and following industry best practices allows you to provide clear evidence to your customers that the network infrastructure was delivered in perfect working order.

Model	Description
DTX-NSM	DTX Network Service Module: Includes one module to verify connectivity, network service and PoE

▸▸ CableIQ™ Qualification Tester

CableIQ is the first qualification tool designed for network technicians who need to trouble-shoot connectivity problems and qualify cabling bandwidth. It gives network techs the vision to see whether an existing cabling link is qualified to support 10/100, VoIP or Gigabit Ethernet, quickly isolate cabling from network problems and discover what is at the far end of any cable. 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 can help you close trouble tickets faster and ensure smooth upgrades to higher network speeds.

CableIQ Service Kit combines powerful cable and network testing in one package. Expedites problem resolution and facilitates moves, adds, changes, and upgrades. Quickly qualifies cabling bandwidth and confirms network connectivity

CableIQ Advanced IT Kit

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

- 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

- Discovers 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 with Intelligent Wiremap

- Locates and traces cable with IntelliTone™ digital signaling technology

CableIQ Gigabit Service Kit

Model	Description
CIQ-100	CableIQ Qualification Tester includes CableIQ with remote adapter, soft carrying case and four AA batteries
CIQ-KIT	CableIQ Advanced IT Kit includes CableIQ with remote adapter, IntelliTone 200 Probe, six remote office IDs, rugged carrying case and four AA batteries
CIQ-SVC	CableIQ Service Kit includes CableIQ Qualification Tester with remote adapter, LinkRunner Network Multimeter, IntelliTone 200 Probe, six remote cable IDs and a rugged carrying case
CIQ-GSV	CableIQ Gigabit Service Kit includes CableIQ Qualification Tester with remote adapter, LinkRunner Pro Network Multimeter, IntelliTone 200 Probe, six remote cable IDs and a rugged carrying case
CIQ-KRQ	CableIQ Residential Qualifier Kit includes CableIQ Qualification Tester, RJ45 patch cord (2), RJ11 patch cord (2), bare wire adapter, speaker wire adapter, coax cable, coax BNC adapter, coax RCA adapter, "Qualified" labels (50) and a soft carrying case
CIQ-VOIP	CableIQ VoIP Enterprise Service Kit includes CableIQ with remote adapter, CableIQ Reporter software CD, IntelliTone Pro 200 Probe, CableIQ Remote IDs #2-7, NetTool Series II Pro VoIP tester with 10/100/1000Mbps inline, VoIP option, NetProve diagnostics, NetTool Connect PC software, WireView Wiremapper #1, (2) RJ45-RJ45 patch cord, (2) USB cables, coax "F" push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, RJ11-RJ11 patch cord, Ethernet cable, hard carry case for CableIQ, and soft carrying case for NetTool Series II Pro VoIP

Copper Certification and Verification Accessories

▶▶ DTX Series Accessories

Model	Description
DTX-COAX	DTX Coax Cable Test Adapter (2 adapters included)
DTX-PCU6S	DTX Series UTP Cat 6 Patch Cord Adapter Set includes DTX Main adapter (DTX-PCU6/MN) and DTX Smart Remote adapter (DTX-PCU6/SR)
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-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-CHA001A	Cat 6/Class E Channel Adapter optimized for Alien Crosstalk measurements
DTX-TSET	Headset for DTX cable analyzer
DTX-ACUN	AC charger, universal
DTX-ACNA	AC charger, North America
DTX-CASE	Standard carrying case – DTX Series
DTX-STRP	DTX carrying strap
DTX-USB	USB interface cable (mini-B)
DTX-SER	Serial RS-232 cable (DB-9 to IEEE 1394)
DTX-LION	Lithium-ion battery pack

▶▶ CableIQ Accessories

Model	Description
CIQ-CIT	CableIQ IT hard carrying case
CIQ-COAX	CableIQ Coax Adapter Kit includes F-connector, BNC and RCA connectors
CIQ-IDK24	CableIQ Remote Identifier Kit includes remote identifier numbers 2-4
CIQ-IDK57	CableIQ Remote Identifier Kit includes remote identifier numbers 5-7
CIQ-RJA	RJ45/11 modular adapter
CIQ-SPKR	CableIQ speaker wire adapter
CIQ-WM	CableIQ main wiremapadapter (replacement part for lost or damaged unit)
CLIP-SET	Clip Set includes RJ45-to-8-clip test lead
MT-8200-53A	IntelliTone Pro 100 Probe includes IntelliTone 100 Probe, lanyard, owners CD and quick start guide, and 9-volt battery
MT-8200-63A	IntelliTone Pro 200 Probe includes IntelliTone 200 Probe, RJ11 and RJ 45 patch cables, lanyard, owners CD and quick start guide, and 9-volt battery

▶▶ 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
- New 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, 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 gives you the ability to manage test results data from multiple testers with one software application
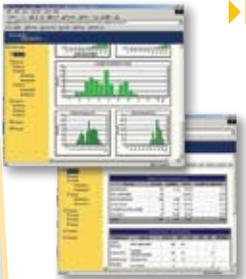
▶▶ LinkWare™ Stats

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. Filter incoming data to highlight exactly what you're looking for. View graphs and tables showing margins by test standard, operator, location and other attributes. Demonstrate that an installation meets warranty requirements. And win business with customized summary reports. It's all part of Network SuperVision – only from Fluke Networks.

- 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	LinkWare Stats Statistical Report Option

▶▶ MicroScanner² Cable Verifier

Next generation MicroScanner streamlines voice/data/video cable and service testing. Revolutionary 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, wiremap, cable ID, and distance to fault all are displayed on one oversized backlit screen. Replace multiple tools by testing all RJ11, RJ45, 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	MicroScanner² Cable Verifier
MS2-KIT	MicroScanner² Professional Kit includes MicroScanner² Cable Verifier, Remote ID #s 2-7, IntelliTone Pro 200 Probe, bare wire adapter, coax cable, two shielded RJ45 cables, two RJ11 cables, and a deluxe carry case
MS2-TTK	MicroScanner² Termination Test Kit includes MicroScanner² Cable Verifier, IS60 Pro Tool Kit, IntelliTone™ Pro 200 Probe, RJ11 and RJ 45 patch cables, lanyard, owners CD and quick start guide, 9 volt battery, and a deluxe carry case
MS2-IDK27	MicroScanner² Remote ID Kit #s 2-7
CLIP-SET	RJ-45 to Eight Alligator Clip Adapter
MT-8200-63A	IntelliTone Pro 200 Probe

▶▶ MicroMapper™ Pro VDV Cable Tester

MicroMapper Pro simplifies voice/data/video cable testing with a "quick check" test for twisted pair and coax connectors to TIA568A/B specifications. Test terminations, length, cable ID, and location reliably and quickly with one tester. Full wiremap, including split pair and distance to break, clearly displayed on a large LCD. It features built-in analog toning to locate and isolate wire pairs during installation. MicroMapper Pro is a durable tester that comes in a small, user-friendly package, making it a convenient tool for any job.

The MicroMapper Pro Kit provides comprehensive locating, verifying, and ID tagging with the MicroMapper Pro VDV Cable Tester, Pro3000™ Probe, and eight included cable IDs.

- Verifies voice/data/video cable wiremap with a "quick-check" test
- Tests twisted pair and coax connectors without adapters
- Locates cable with built-in analog toner

Model	Description
MMP-50	MicroMapper Pro VDV Cable Tester
MMP-KIT	MicroMapper Pro Kit includes MicroMapper Pro VDV Cable Tester, Remote ID #2-8, and a Pro3000 Probe
MMP-TTK	MicroMapper™ Pro Termination Test Kit includes MicroMapper™ Pro VDV Cable Tester, IS50 Pro-Tool Kit, Pro3000 Probe, #1 Cable ID, F-type adapter, multi-language Getting Started Guide, batteries, and a deluxe carry case
MMP-IDK28	MicroMapper Pro ID Kit #2-8
MMP-ID1	MicroMapper Pro ID #1
26100900	Pro3000 Probe

▶▶ 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 from within that bundle. Digital signal rejects noise and safely tones active networks. Smart-Tone™ 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 RJ11 and two RJ45 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, RJ11 and RJ45 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 the innovative analog toner and probe from Fluke Networks. It's your best choice for toning and tracing bare wire on non-active networks. Easily identify individual pairs with its patented SmartTone technology (the five different tones for exact pair identification). Angled-bed-of-nails clips allow easy access to individual wires, and the RJ11 connector is ideal for use on telephone jacks. The large powerful speaker on the probe 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. Attach the nylon pouch to your belt, and you will be equipped for any wire identification job.

• Select solid or alternating tone options, indicated with solid or flashing LEDs
• Exclusive SmartTone technology can generate 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

▶▶ TS®90 Cable Fault Finder

The TS90 is our easy-to-use, three-tools-in-one tester – a fault locator, a cable inventory manager and a toner with SmartTone™ technology (up to 2,500 feet). Easily find the distance to opens or shorts on electrical wire, telephone wire, security wire and coax. Displays distance reading rather than waveform.

- Works on any two or more conductor cable up to 2,500 feet
- Instantly measures distance to open or any fault from one end of any cable pair
- Patented SmartTone™ tone generator positively identifies pair
- Measures cable distance on spool
- Measures constantly while "on"

Model	Description
26500090	TS90 cable fault finder with BNC to alligator clips
26501100	TS90 linecord, BNC to alligator clip
26501160	TS90 pouch with belt clip
26501200	TS90 linecord, BNC to F (male)
26501300	TS90 linecord, BNC to F (female)
26501600	TS90 linecord, banana
26501700	TS90 linecord, BNC to banana to ABN

▶▶ TS®100 Cable Fault Finder

Similar to the TS90, the TS100 is three tools in one tester – a fault locator, a cable inventory manager and a toner with SmartTone™ technology (up to 3,000 feet). Easily find the distance to opens or shorts on electrical wire, telephone wire, security wire and coax. Displays distance reading rather than waveform.

- Works on any two or more conductor cable up to 3,000 feet (metric unit also available)
- Instantly measures distance to open or any fault from one end of any cable pair
- Patented SmartTone™ tone generator positively identifies pair
- Measures cable distance on spool
- Measures constantly while "on"

Model	Description
26500000	TS100 cable fault finder with BNC to alligator clips
26500500	TS100 with BNC to banana to ABN
26500610	TS100 metric cable fault finder with BNC to alligator clips
26501100	TS100 linecord, BNC to alligator clip
26501160	TS100 pouch with belt clip
26501200	TS100 linecord, BNC to F (male)
26501300	TS100 linecord, BNC to F (female)
26501600	TS100 linecord, banana
26501700	TS100 linecord, BNC to banana to ABN

Fiber Certification and Testing

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 inspecting, verifying, troubleshooting, and documenting enterprise fiber optic cabling. From OTDRs to cleaning supplies, Fluke Networks has a fiber optic tool to meet the needs of cabling contractors, installers and 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 fiber choice.

Fiber Certification and Testing Product Comparison

	OptiFiber® OTDR	DTX Compact OTDR Module	DTX Fiber Modules	CertiFiber®	SimpliFiber™ Pro Optical Power Meter and Fiber Test Kits	FiberInspector™ Pro	VisiFault™ Visual Fault Locator
Pass/fail results	•	•	•	•			
Documents test results	•	•	•	•	•		
Fiber types supported	Multimode, singlemode	Multimode, singlemode	Multimode, singlemode	Multimode	Multimode, singlemode	Multimode, singlemode	Multimode, singlemode
Dual wavelength testing	•	•	•	•	•		
Dual fiber loss Testing	•		•	•			
Automated OTDR	•	•					
Fiber end-face inspection	•				•	•	
Identifies faults/ breaks	•	•	•		•		•
Verifies optical power/fiber link loss	•		•	•	•		
Basic (Tier 1) loss test	•		•	•	•		
Extended (Tier 2) OTDR test	•	•					
Source type	LED, FP LASER	LED, FP LASER	LED, FP LASER, VCSEL	LED	LED, FP LASER		LASER
Locates faults/breaks	•	•					

▶▶ OptiFiber® OTDR

As bandwidth increases to more than 10 Gb/s, the use of fiber optics in premise networks continues to grow – and so do the requirements for testing and certifying it. To ensure the performance of mission-critical fiber infrastructure, network owners are demanding a more complete picture of their fiber plant. And no solution provides a more complete picture than the OptiFiber® OTDR.

OptiFiber integrates power/loss, fiber length measurement, OTDR analysis and fiber connector end-face imaging to provide a higher tier of fiber certification and diagnostics. The companion LinkWare PC software documents, reports and manages all test data. OptiFiber enables network owners of all experience levels to certify fiber to customer specifications and industry standards, troubleshoot connection-rich links, and thoroughly document results.

- Diagnose and solve fiber problems with integrated ChannelMap™, Auto OTDR and fiber end-face inspection
- Boost productivity with an easy-to-use interface and small, lightweight design
- Certify fiber using integrated Auto OTDR analysis, automated loss and length measurements and fiber end-face inspection
- Enhance visibility into premise, campus and metro networks with short event deadzones
- Document fiber with LinkWare Cable Test Management software

Model	Description
OF-500-01	OptiFiber Multimode OTDR (62.5 µm accessories)
OF-500-01/50M	OptiFiber Multimode OTDR includes mainframe, multimode OTDR module, standard accessories and 50 µm launch fiber
OF-500-02	OptiFiber Advanced Multimode OTDR (62.5 µm accessories)
OF-500-02/50M	OptiFiber Advanced Multimode OTDR (50 µm accessories)
OF-500-03	OptiFiber Singlemode OTDR
OF-500-10	OptiFiber Certifying Multimode OTDR (62.5 µm accessories)
OF-500-10/50M	OptiFiber Certifying Multimode OTDR (50 µm accessories)
OF-500-13	OptiFiber Singlemode SR Certifying OTDR
OF-500-15	OptiFiber SR Certifying OTDR (62.5 µm accessories)
OF-500-15/50M	OptiFiber SR Certifying OTDR (50 µm accessories)
OF-500-35	OptiFiber MM/SM Pro Inspector LL OTDR (62.5 µm and SM accessories)
OF-500-35/50M	OptiFiber MM/SM Pro Inspector LL OTDR (50 µm and SM accessories)
OF-500-45	OptiFiber MM/SM Certifying OTDR (62.5, 50 µm, SM accessories)
OF-500-50	OptiFiber MM/SM Pro Inspector LL OTDR (62.5 um and SM accessories), sets of MFM2 and SFM2 DTX fiber modules, and DTX-1800 CableAnalyzer

▶▶ OptiFiber Modules/Accessories

Model	Description
OFTM-5610B	Multimode OTDR module
OFTM-5611B	Multimode OTDR module with PM
OFTM-5612B	Multimode OTDR module with PM/LL
OFTM-5730	Singlemode OTDR module with VFL
OFTM-5731	Singlemode OTDR module with PM/VFL
OFTM-5732	Singlemode OTDR module with PM/LL/VFL
OFSR-MMREM	OptiFiber Smart Remote with multimode module bundle
OFSR-SFM	Singlemode module for OptiFiber Smart Remote
OFSR-MFM	Multimode module for OptiFiber Smart Remote
OFTM-5352	FiberInspector Pro video probe (250x/400x)

▶▶ Launch Fibers

Model	Description
NFK1-LAUNCH	SC/SC launch fiber, 62.5 µm, 100 m
NFK2-LAUNCH	SC/SC launch fiber, 50 µm, 100 m
NFK3-LAUNCH	SC/SC launch fiber, SM, 130 µm
NFK1-LAUNCH-ST	SC/ST launch fiber, 62.5 µm
NFK1-LAUNCH-LC	SC/LC launch fiber, 62.5 µm
NFK1-LAUNCH-FC	SC/FC launch fiber, 62.5 µm
NFK2-LAUNCH-ST	SC/ST launch fiber, 50 µm
NFK2-LAUNCH-LC	SC/LC launch fiber, 50 µm
NFK2-LAUNCH-FC	SC/FC launch fiber, 50 µm
NFK2-LAUNCH-E2K	SC/E2000 launch fiber, 50 µm
NFK3-LAUNCH-ST	SC/ST launch fiber SM
NFK3-LAUNCH-LC	SC/LC launch fiber SM
NFK3-LAUNCH-FC	SC/FC launch fiber SM
NFK3-LAUNCH-E2K	SC/E2000 launch fiber SM

Visit **www.flukenetworks.com/OTDRdemo** to view the product demo.

▶▶ DTX CableAnalyzer™ Fiber Options

The DTX CableAnalyzer is a test platform that can function as an optical loss test set (OLTS) and/or an Optical Time Domain Reflectometer (OTDR).

Loss/length testing with fiber loss length modules can provide a Basic or Tier 1 fiber certification. 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. 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.

▶▶ DTX Fiber Modules

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

Model	Description
DTX-MFM2	Multimode 850 and 1300 nm
DTX-SFM2	Singlemode 1310 and 1550 nm
DTX-GFM2	Gigabit Multimode 850 and 1310 nm

See page 8 for the DTX CableAnalyzer copper options.

Visit **www.flukenetworks.com/LearnAboutFiber**
to learn more about the topic of fiber testing

▸▸ DTX Compact OTDR

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

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

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

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

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

DTX Compact OTDR Kit (DTX-OTDR-KIT) Choose this option if you own a DTX CableAnalyzer with Loss/length fiber capability and want to add an OTDR option and accessories.

DTX Fiber Certification Kit (DTX-OTDR/LL-KIT) Choose this option if you own a DTX CableAnalyzer without fiber capability. This kit will give you complete fiber certification and troubleshooting capability.

DTX Compact OTDR Module (DTX-OTDR-QMOD) Choose this option if you already own a DTX mainframe and want to add OTDR capability and want to purchase launch fibers separately.

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

▶▶ SimpliFiber Pro® Optical Power Meter and Fiber Test Kits

With new advanced functions that make fiber testing simple, Fluke Networks' 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. Choose from the FTK 1000 basic verification kit, the FTK 1300 or FTK1350 full-featured inspection and multimode verification kit, or the FTK 1450 complete fiber verification, inspection, and cleaning kit. Each SimpliFiber Pro set 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 1000 results – large internal memory enables continuous testing and recording; fully compatible with our popular LinkWare™ Cable Test Management Software
- Quickly locate cable fault, polarity, and connector problems with VisiFault VFL (not available in all kit configurations)

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, 1490, 1550, and 1625 nm, inspect fiber end-faces, locate cable faults, connector problems, and polarity issues. Kit combinations offer a variety of inspection options.

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. Kit combinations offer a variety of inspection options.

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.

Model	FTK1000	FTK1300	FTK1350	FTK1450	FTK2000
SimpliFiber Power Meter	•	•	•	•	•
SimpliFiber Source 850/1300 MM source	•	•	•	•	
SimpliFiber Sources 1310/1550 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	•	•	•	•	•

▶▶ CertiFiber®

CertiFiber tests and certifies the compliance of multimode fiber optic networks to industry standards. It is the most productive and reliable method of testing LAN fiber networks.

- Measures multimode fiber length and optical loss
- Measures optical power and loss at 850 nm and 1300 nm using LED dual-wavelength sources
- Saves 1000 Autotest results under customized job and circuit ID names
- Features a standards library for easy setup
- Incorporates interchangeable connector adapters for simple network connection

Model	Description
8240-04	CertiFiber, remote, LinkWare Software, carrying case
8002-15	ST interchangeable connector adapter (1)
8002-16	SC interchangeable connector adapter (1)
8002-17	FC interchangeable connector adapter (1)
8002-19	Connector adapter, LC fiber, interchangeable

▶▶ 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.

- Prevent the #1 cause of fiber link failure: end-face contamination
- Everything needed for precision cleaning of end-faces on both patch cords and inside ports
- Specially formulated solvent dissolves contaminants, neutralizes static charge and encapsulates particles for removal
- A range of wipers and swabs enable cleaning of all styles of fiber optic connections
- By fitting in your pocket, Fiber Optic Cleaning Cards are conveniently perfect for troubleshooting
- 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-Swabs-Multi	Multi MTP/MPO port cleaning swabs (25 count)
NFC-Case	Carrying case for cleaning accessories
FT525	FiberInspector Mini and Cleaning Kit

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

Model	Description
FT600	FiberInspector Pro Video Microscope
OFTM-5352	FiberInspector Pro for OptiFiber Certfying OTDR
OPV-FT600	FiberInspector Pro for OptiView Integrated Network Analyzer

- 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
- Contains high-magnification optics that provides crisp, clear images of microscopic debris and end-face damage

▶▶ 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.

Model	Description
FT500	FiberInspector Mini Video Microscope
FT525	FiberInspector Mini and Cleaning Kit

- The exceptionally convenient FiberInspector Mini uses a 200x magnification probe sufficient for inspecting both multimode and singlemode fiber
- Quickly determines whether fiber connectors on a hardware device are clean and in good condition without disassembling the device
- Contains high-magnification optics that provide crisp, clear images of microscopic debris and end-face damage

▶▶ 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.

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

- Ensures clean, smooth terminations ready for optical transmission
- Special safety filter to protect your eyes from harmful infrared rays
- Handheld microscopes used to inspect the ends of fiber optic connections
- FT120 offers 200X magnification, FT140 offers 400X magnification

▶▶ 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.

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

- Bright red visible laser light source, features continuous and flashing modes
- Accelerates end-to-end fiber continuity checks
- Speeds fiber tracing and identification
- Aids in location of fiber faults including tight bends, breaks and bad connectors

Fiber Certification and Verification Accessories
▶▶ Inspection Adapters

Model	Description
NFM110	Accessory tip set for FiberInspector Mini (LC, FC and 1.25 mm)
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
NF366	E2000 video probe adapter tip for FiberInspector Pro
NF368	1.25 mm universal video probe adapter tip for male ends for FiberInspector Pro
NF370	MTP/MPO video probe adapter tip for FiberInspector Pro
NF395	APC (Angled Physical Connector) video adapter probe for FiberInspector Pro
NF300SM	ST/ST SM fiber optic adapter
NF310SM	SC/SC SM fiber optic adapter

▶▶ Patchcord Adapters, and Mandrels

Model	Description
NF-MANDREL-50	Mandrel, 3 mm fiber cable, 50 µm (1)
NF-MANDREL-625	Mandrel, 3 mm fiber cable, 62.5 µm (1)
NF300SM	Fiber Optic adapter, ST/ST, singlemode
NF310SM	Fiber Optic adapter, SC/SC, singlemode
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-LC	LC accessory kit includes (2) duplex MM 62.5 um patch cables for LC adapter, dual LC-to-dual LC test jumper and adapter
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 µm 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 singlemode test reference cords for FC adapter – set of two
NFK3-DPLX-LC	Duplex singlemode test reference cords for LC adapter – set of two
NFK3-DPLX-SC	Duplex singlemode test reference cords for SC adapter – set of two
NFK3-DPLX-ST	Duplex singlemode 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

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

Introducing the JackRapid termination tool – 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. Get clean, consistent cuts every time. 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

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.

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

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

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

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

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

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

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
- Accepts Phillips-head or flat screwdriver blade

Model	Description
10061000	D914S impact tool
10061100	D914S impact tool with EverSharp 66 blade
10061110	D914S impact tool with EverSharp 110 and EverSharp 66 blade
10061501	D914S impact tool with EverSharp 110, EverSharp 66 blade and free blade
10061503	D914S impact tool with BIX and EverSharp 66/110 cut blade
10061810	D914S impact tool with EverSharp 66/110 cut blade

D914™ Impact Tool

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 optical transmission
- 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
- Accept Phillips-head or flat screwdriver blade

Model	Description
10051000	D914 impact tool
10051100	D914 impact tool with EverSharp 66 blade
10051110	D914 impact tool with EverSharp 110 blade
10051120	D914 impact tool with EverSharp 110 and EverSharp 66 blade
10051501	D914 impact tool with EverSharp 110, EverSharp 66 blade and free blade

D814™ Impact Tool

The D814 impact tool is a deluxe, all-in-one, telecom punch-down tool from Fluke Networks 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	D814 impact tool with EverSharp 66 blade
10055110	D814 impact tool with EverSharp 110 blade
10055200	D814 impact tool with EverSharp 110 and EverSharp 66 blade
10055501	D814 impact tool with EverSharp 110, EverSharp 66 blade and free blade
10055503	D814 impact tool with BIX and Eversharp 66/110 cut blade

D-Impactor™ 5-Pair Impact Tool

Fluke Networks' 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
10979004	110 blade kit
10979002	Blade storage case

▶▶ 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.

10056000	10056003	10057000	10176000	10436001	10465001
66 blade	**8762D-66 extra long cutter blade**	**630 blade**	**110 blade**	**Centerpunch blade**	**3M System D blade**
10056225 **66 blade, bulk** (must be ordered in multiples of 100)			10176225 **110 blade, bulk** (must be ordered in multiples of 100)		

10645001	10565000	10565110	10665000	10051200	10051300
Wood screw starter punch	**Krone blade**	**Krone/110 cut blade**	**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.

- All kits include ergonomically designed Dur-a-Grip pouch for convenient tool storage on belt
- D914 and D814 industry standard punchdown tools make for solid terminations
- Easy-to-use cable stripper quickly rings and slits many types of cable
- Cut and strip wire cleaner and faster with the Electrician's D-Snips

▶▶ Kit Descriptions

IS60 Pro-Tool Kit
- D914S Impact tool
- Electrician's D-Snips
- Cable stripper
- Mini Maglite®
- Dur-a-Grip pouch
- EverSharp 66/110 cut blade

IS25 Pro-Tool Kit
- Electrician's D-Snips
- Cable knife
- Mini Maglite®
- Dur-A-Grip Pouch

IS50 Pro-Tool Kit
- D914S Impact tool
- Electrician's D-Snips
- Cable stripper
- EverSharp 66/110 cut blade
- Dur-A-Grip pouch

IS15 Pro-Tool Kit
- Electrician's D-Snips
- Cable knife
- Dur-A-Grip pouch

IS40 Pro-Tool Kit
- D814 Impact tool
- Electrician's D-Snips
- Cable stripper
- EverSharp 66/110 cut blade
- Probe pic
- Dur-A-Grip pouch

Model	Description
11291000	IS40 Pro-Tool Kit
11291400	Pro-Tool Kit IS40 pouch only
11292000	IS50 Pro-Tool Kit
11292400	Pro-Tool Kit IS50 pouch only
11293000	IS60 Pro-Tool Kit
11293400	Pro-Tool Kit IS60 pouch only
11295000	IS25 Pro-Tool Kit
11295400	Pro-Tool Kit IS25 pouch only
11296000	IS15 Pro-Tool Kit
11296400	Pro-Tool Kit IS15 pouch only

▶▶ Electrical Contractor Telecom Kits

Fluke Networks Electrical Contractor Telecom Kits are comprised of industry standard telecom-munications 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.

- Choose either Kit I with TS®30 Test Set or Kit II with Pro3000 Analog Tone and Probe
- D814 industry standard punchdown tool for reliable terminations
- EverSharp 66/110 cut blade provides flexibility for different block and jack terminations
- Cable stripper quickly rings and slits many types of cable
- Use the probe pic to check for loose or damaged connections
- Cut and strip wire cleaner and faster with the Electrician's D-Snips
- Connect to jacks for testing with the standard 4-wire modular adapter
- A soft zippered pouch keeps your tools all in one convenient place

▶▶ Kit Descriptions

Electrical Contractor Telecom Kit I
- TS®30 Test Set with angled bed-of-nails cord
- D814 impact tool
- EverSharp 66/110 cut blade
- Electrician's D-Snips
- Cable stripper
- Standard 4-Wire modular adapter
- Probe pic

Electrical Contractor Telecom Kit II
- Pro3000 Analog tone and probe
- D814 impact tool
- EverSharp 66/110 cut blade
- Electrician's D-Snips
- Cable stripper
- Standard 4-Wire modular adapter
- Probe pic

Model	Description
11290000	Electrical Contractor Telecom Kit I (with TS®30 Test Set)
11289000	Electrical Contractor Telecom Kit II (with Pro3000™ Analog tone and probe kit)
11289400	Soft case, Electrical Contractor Telecom kit
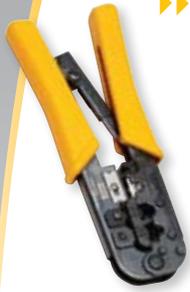
Modular Crimper

Fluke Networks' 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

Fluke Networks' cable splicing knife is the perfect tool for splitting cable sheaths. Soft, 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
• No slip, easy-to-grip handle
• Cuts various insulation types

Model	Description
44400000	Cable splicing knife

D-Snips™

Fluke Networks' Electrician's D-Snips™ offer a unique ergonomically-designed handle that leverages your power, providing 1½ times the cutting force with half the effort.

• Ergonomic design provides 1½ 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

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. Made to last with high-quality forged steel, these snips are a must have for your tool bag.

• 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

Model	Description
44500000	Electrician's snips

Cable Strippers

Fluke Networks' line of cable strippers includes a double slot-ted 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 offered
- 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 cutter, 22/24 gauge
44200013	Double slotted stripper 22/24 gauge
11231257	Coax stripper, 2-level
11231255	Coax stripper, 2 and 3-level

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

Model	Description
11294000	Need-L-Lock crimping pliers

Probe Pic

Fluke Networks' 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
- Compact size

Model	Description
44600000	Probe pic, 105 degree

Can Wrench

Fluke Networks' can wrenches allow 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

▸▸ Basic tools to get the job done quickly and accurately

While it's easy to get caught up in the technology of today's cable testers, it's important to remember that the installation starts with some very basic tools. And having the right tool can make all the difference. To begin cutting, stripping, and connecting cabling blocks and jacks, you need a punchdown tool with impact force, a cable stripper, and a pair of scissors. You only have two hands, so a durable pouch to carry these tools will be helpful for transport and ease of use once you are on the job.

Punchdown Tool

A punchdown tool properly terminates telecommunications cables. When any wire is punched down, force is required to seat and terminate the wire. The basic impact tool has a spring-loaded head, which you compress using the force of your hand. Once the spring reaches full compression, it's automatically released and the force is transferred to the head of the impact tool, which seats the wire.

Most impact tools accommodate a number of interchangeable blades, depending on the cabling system at your job site. The tool helps you push each wire into the IDC tower to make a permanent connection. Some punch-down tool blades have a cut side that removes the excess wire after the wire is pushed onto the connector; others require you to cut off the wire snips. Also, some punchdown tools offer a soft, rubber handle. This gives you a better grip and reduces wear and tear on your hand. Let the tool absorb some of the impact recoil and give your hand a rest!

Cable Stripper

A cable stripper with an adjustable gauge guarantees fast, easy removal of outer insulation from all unshielded twisted pair, shielded twisted pair and multicore cables. An adjustable depth gauge and a reference for checking the length to be stripped ensures repeatable results and improves work quality. Using alternative methods such as a pocket knife or scissors could result in stripping more cable sheath than necessary and damaging the cable itself.

Snips

Professional snips are important for a fast, clean, and safe cut. You'll need to cut cable and trim excess wires on every job. Some specialty tools offer a unique, ergonomically-designed handle that leverages your physical strength, providing 1½ times the cutting force with half the effort. The special "tail" on the handle that provides the added leverage also minimizes hand fatigue.

Armed with a punchdown tool, a cable stripper and pair of professional snips, you will be well on your way to a successful installation. A professional, durable pouch that holds these tools and clips to your belt will save you time and give you more freedom.
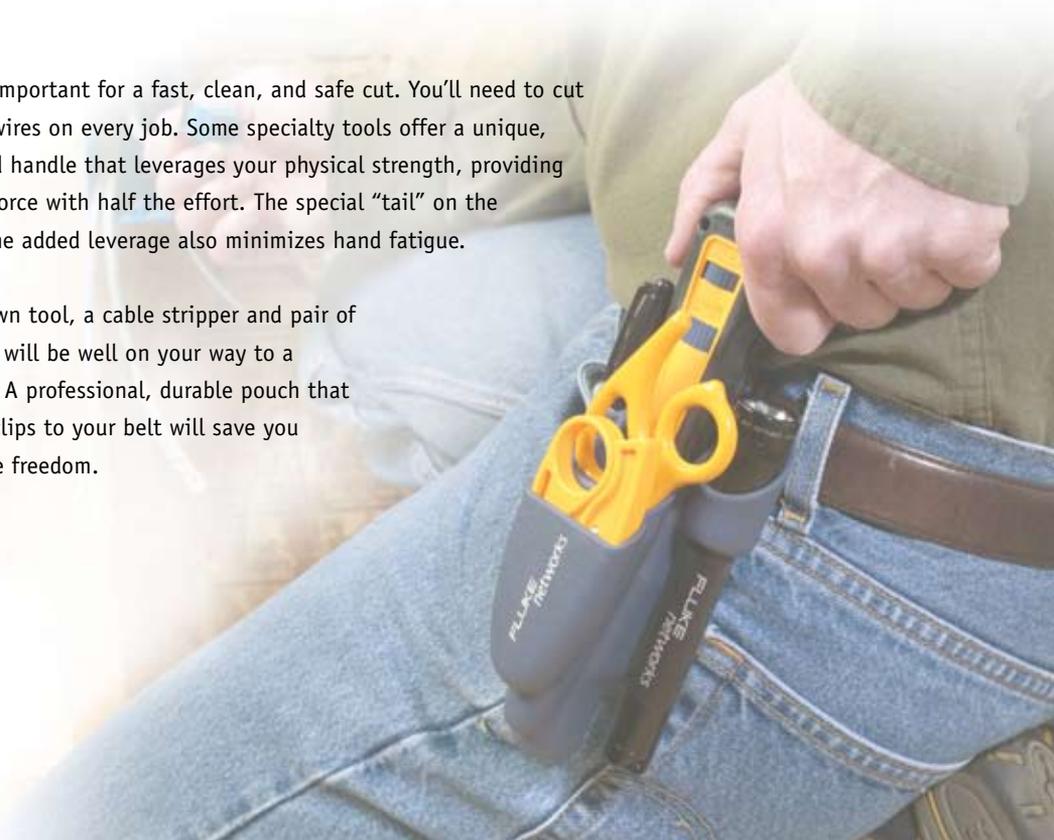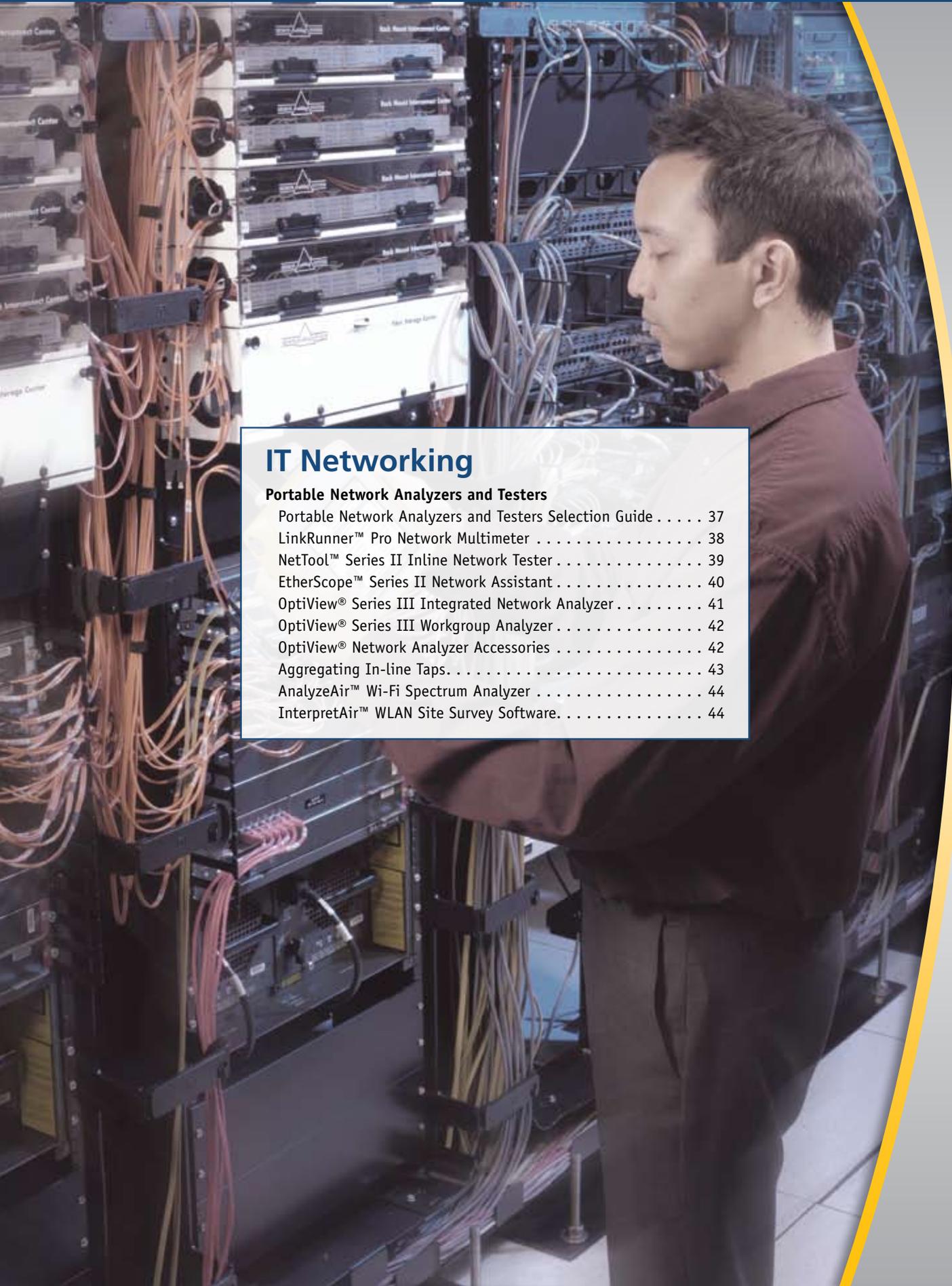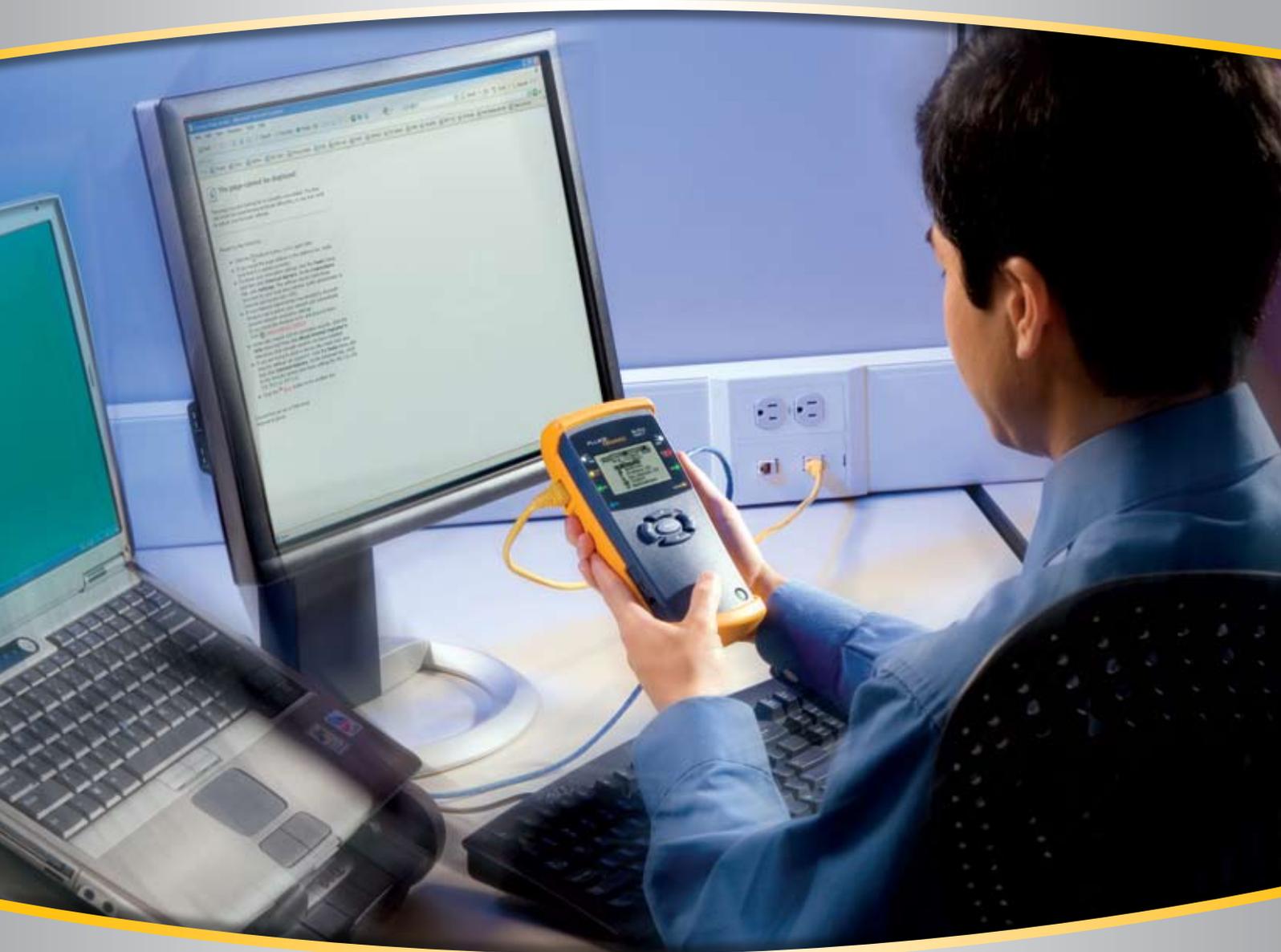
IT Networking

IT Networking

Portable Network Analyzers and Testers

Portable Network Analyzers and Testers

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

Today's networks are typically very 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. The more your network changes, the more you need to improve network vision and control to help you overcome the different types of challenges you encounter every day.

With Fluke Networks' family of portable network analyzers and testers, frontline technicians and network engineers get a unique view into their LAN, WLAN, VLAN and WAN networks. From a single user unable to connect to the network to troubleshooting slow application issues, 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 analyzers and testers. Take these tools anywhere, anytime, to isolate any problem... fast.

▶▶ **Portable Network Analyzers and Testers Selection Guide**

LAN 802.3 Analysis and Testing

	OptiView® Series III Integrated Network Analyzer	EtherScope™ Series II Network Assistant	NetTool™ Series II Inline Network Tester	LinkRunner™ Pro Network Multimeter
Cable verification		•	•	•
Link/IP connectivity (10/100/Gig)	•	•	•	•
Port location/ID	•	•	•	•
Link troubleshooting	•	•	•	•
802.1x security configuration	•	•	option	•
PoE voltage/pairs		•	•	•
VoIP diagnostics	option		option	
Inline testing			•	
Identify spyware, malware, and viruses on individual PCs			option	
Application connectivity	•	option	•	
Gigabit fiber optic interface	1000BASE-SX Included	option		
Discovery range	Enterprise-wide 10,000+ devices	Broadcast domain 1000+ devices	PC, switch, VoIP phone	PC, switch
VLAN discovery	•	•		
WAN interface details	•			
Protocol analysis packet capture and decode	•			
Traffic analysis on VLAN	•			
IPv6 Infrastructure analysis	option			
Wireless LAN Infrastructure analysis	option			
VoIP call quality statistics	option			
Traffic generation	•	option		
LAN/WAN performance assessment	•	option		
Host discovery on Layer 3 switches	•	•		
Remote control sessions	7	1		
Application Troubleshooting Expert	option			

Wireless Network Analysis

	OptiView® Series III Integrated Network Analyzer	EtherScope™ Series II Network Assistant	AnalyzeAir™ Wi-Fi Spectrum Analyzer	InterpretAir™ WLAN Site Survey Software
Device and network discovery	•	•	Device only	
RF interferers identification and location			•	
RF analysis	Channel	Channel	Spectrum	
802.11 a/b/g analysis	•	•	•	•
802.11 n analysis	•	Discovery and Location	•	
Network access troubleshooting	•	•		
Security scan	•	•	•	
Rogue locating	•	•		
Automated problem detection	•	•		
Pre-deployment planning			•	•
Simulation				•
Installation verification and site survey				•
RF health criteria visualization				•

LinkRunner™ Pro Network Multimeter

LinkRunner Pro Network Multimeter link tester empowers technicians to resolve a broader range of today's connectivity problems. Unlike with traditional 10/100 link testers, LinkRunner Pro verifies Gigabit links – increasingly important for today's high-performance networks. It also pings up to 10 key devices, detects Power over Ethernet (PoE), resolves 802.1X security conflicts, verifies cable wiremap, and identifies the nearest switch port with Cisco, Extreme and IEEE Link Layer Discovery Protocols (CDP/EDP/LLDP). Built-in IntelliTone digital toning precisely locates cables at patch panels and switches. Link status reports can be uploaded from USB port and routed with trouble tickets to expedite problem resolution.

- Link at 10/100/Gig: identify device capabilities and confirm actual speed/duplex status
- Ping key devices: measure response of DHCP, router, DNS, and other devices or URLs
- Verify 802.1X settings: authenticate with EAP type, user name, certificates, and password
- Detect PoE service: verify voltage level and pairs to IEEE 802.3af specifications
- Identify switch port: supports Cisco, Extreme, and IEEE Link Layer Discovery Protocols
- Test cable wiremap: measure length, detect miswires, shorts, split pairs or opens
- Locate and ID cable: use IntelliTone or optional IDs to locate cables at patch panels
- Document results: upload link status reports with USB port for faster problem resolution

Model	Description
LRPRO-1000	LinkRunner Pro Network Multimeter includes LinkRunner Pro, WireView Cable ID #1, LinkRunner Connect software CD, USB cable, LinkRunner Pro Getting Started Guide (English, Spanish, French, German, Portuguese, Japanese, Simplified Chinese), four (4) AA alkaline batteries
LINKRUNNER	LinkRunner Network Multimeter 10/100 Mbps
Kits	
CIQ-GSV	CableIQ Gigabit Service Kit includes CableIQ Qualification Tester, LinkRunner Pro Network Multimeter, IntelliTone Pro 200 Probe, CableIQ Remote Identifiers #1-7, WireView Cable ID #1 and CableIQ Reporter software CD
LRPRO-KIT	LinkRunner Pro Extended Test Kit includes LinkRunner Pro, IntelliTone Pro 200 Probe, WireView Cable IDs #1-6, clip-set RJ45 to eight alligator clip bare wire adapter and LinkRunner Connect software CD
LINKRUNNER-KIT	LinkRunner Extended Test Kit includes LinkRunner Network MultiMeter 10/100 Mbps, cable ID kit (#1-8), wiremap adapter, RJ-45 coupler, IntelliTone 100 Probe, clip set, NiMH battery pack, NiMH battery charger, custom carrying case and PC Inspector software
Options	
LRPRO-REFLCT-OPT	Reflector option for LinkRunner Pro
Accessories	
LRPRO-LION	Lithium-ion battery pack for LinkRunner Pro

▸▸ NetTool™ Series II Inline Network Tester

Isolate and document network device and application connectivity issues in seconds with NetTool Series II from Fluke Networks. 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. Get inline visibility into 10/100/Gig links to see actual traffic between switches, PCs, IP phones and other devices. Quickly diagnose IP phone problems and measure key call quality metrics. Verify the readiness of PoE systems and troubleshoot PoE device problems. Speed cable and fault location on active networks with IntelliTone™ digital technology. Create comprehensive reports of your network.

- NetProve diagnostics: isolate device and application connectivity issues in seconds
- 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
- Verify readiness of PoE systems and troubleshoot PoE device problems
- IntelliTone digital cable location and isolation technology speeds cable troubleshooting

Model	Description
NTS2-NSKIT	NetTool Series II Network Service Kit includes 10/100/1000 Mbps inline, VoIP option, monitoring and authentication option, NetProve diagnostics, IntelliTone toning, IntelliTone Pro 200 Probe, NetTool Connect PC software, WireView Wiremappers #1-6 and deluxe carrying case
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
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
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
NT-PRO	NetTool 10/100 Pro includes 10/100 Mbps inline, NetTool Blaster PC software, NetTool Cable Identifier, set of four AA alkaline batteries, serial cable, Ethernet cable, Getting Started Guide, CD with multilanguage user manuals, and soft carrying case
NT	NetTool 10/100 includes 10/100 Mbps single-ended testing, NetTool Blaster PC software, NetTool Cable Identifier and soft carrying case
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
Accessories	
NT-AC-ADAPT	NetTool AC power adapter for NT 10/100
NT-Holster	Holster for NT 10/100
NT-BATT-CHG	NiMH battery charger for NT 10/100 and LinkRunner Network Multimeter
BATT-AA-NIMH	Rechargable NiMH battery set (4) for all NT models and LinkRunner Network Multimeter
DTX-ACUN	AC universal adapter for DTX, NTS2, ES, ES2
NTS2-POWERPACK	AC adapter and NiMH battery set for NT Series II

EtherScope™ Series II Network Assistant

A handheld 10/100/Gigabit and 802.11 wireless LAN analyzer that assists frontline IT professionals with Ethernet performance measurement, network installation, LAN validation and troubleshooting. Measure end-to-end Ethernet performance at rates up to 1Gbps. Verify and edit infrastructure configurations. Validate LAN services, service responsiveness, and link performance. Troubleshoot wired and wireless LAN problems fast.

- The essential toolkit for network first responders. The right combination of troubleshooting tools in a handheld platform to help network professionals solve a wide range of problems fast.
- Assists network installers with Ethernet performance measurement, installation configuration and LAN validation.
- Analyze 10/100/Gigabit twisted pair and 100/Gigabit fiber optic Ethernet LANs. Troubleshoot switched networks. Discover devices, networks VLANs, and QoS. 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 draft 802.11n access points.
- Measure end-to-end Ethernet performance of LAN and WAN links using IETF RFC 2544 and advanced tests at rates up to 1 Gbps over copper or optical fiber cabling.

Model	Description
ES2-LAN-SX	EtherScope Series II Network Assistant with 802.3 LAN analysis and fiber optic interface
ES2-LAN-SX/I	EtherScope Series II Network Assistant with 802.3 LAN analysis, fiber optic interface, and ITO/RFC 2544 tests
ES2-LAN-SX/I-KIT	Kit including an EtherScope Series II Network Assistant with 802.3 LAN analysis, fiber optic interface, and ITO/RFC 2544 tests, and a LinkRunner Pro with Reflector option
ES2-PRO-SX/I	EtherScope Series II Network Assistant with 802.3 LAN and 802.11a/b/g WLAN analysis, fiber optic interface, and ITO/RFC 2544 tests
ES2-PRO-SX/I-KIT	Kit including an EtherScope Series II Network Assistant with 802.3 LAN and 802.11a/b/g WLAN analysis, fiber optic interface, and ITO/RFC 2544 tests, and a LinkRunner Pro with Reflector option
ES2-PRO-SXLX-I/S	EtherScope Series II Network Assistant with 802.3 LAN and 802.11 ab/g/ WLAN analysis, fiber optic interface (SX and LX transceivers), ITO/RFC 2544 tests, comprehensive set of accessories, and a larger carrying case
ES2-LAN*	EtherScope Series II Network Assistant with 802.3 LAN analysis
ES2-WLAN	EtherScope Series II Network Assistant with 802.11a/b/g WLAN analysis
ES2-PRO*	EtherScope Series II Network Assistant with 802.3 LAN and 802.11a/b/g WLAN analysis*

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

Options	
ES-LAN-OPT	802.3 LAN analysis option
ES-WLAN-OPT	802.11a/b/g WLAN analysis option, PCMCIA radio card, external directional antenna
ES-ITO-OPT	ITO/RFC2544 option, includes Service Performance tool, traffic generator, RFC2544 and advanced performance tests
ES2-SX-OPT	Fiber interface option, SX Gigabit SFP transceiver (only for Series II models)
Accessories	
MT-8200-63A	IntelliTone 200 Probe
DSP-FTK	Fiber optic test kit
LRPRO-REFLCT	LinkRunner Pro with Reflector Option
ES-ACCY-KIT	Accessories kit, includes LION battery, external battery charger, cable IDs, mini keyboard, larger carrying case

▸▸ OptiView® Series III Integrated Network Analyzer

The only portable, integrated network analyzer that gives you enterprise-wide vision to help deploy new technologies and applications, manage and validate infrastructure changes, solve network and application performance issues, and secure your network from internal threats. All-in-one analyzer combines network discovery, traffic and infrastructure analysis, advanced packet capture/decode, and WAN, WLAN and VoIP capabilities. Get a clear view of your entire enterprise – providing visibility into every piece of hardware, every application, and every connection on your network. It shows you where your network stands today and helps you accurately assess its readiness for the changes you need to make.

- Complete network vision in seconds
- All the network tools you need to see all seven layers of the network
- Combines protocol analysis, active discovery, SNMP device analysis, and RMON2 traffic analysis into a mobile solution
- See key enterprise data from multiple advanced network tests into an information-rich, easy-to-understand front page
- Web enabled remote analysis allows up to seven users to access a single unit simultaneously

Model	Description
OPVS3-GIG	OptiView Series III Integrated Network Analyzer Pro Gigabit.
OPVS3-GIG/W	OptiView Series III Integrated Network Analyzer Pro Gigabit includes OPV-WNA4 (802.11 a/b/g/n Wireless Network Analysis Option)
OPVS3-GIG/S	OptiView Series III Integrated Network Analyzer Pro Gigabit with OPVS3-ATE (OptiView Application Troubleshooting Expert), OPVS2-VOIP (Voice over IP), and OPV-WNA4 (802.11 a/b/g/n Wireless Network Analysis options)
OPVS3-GIG/RHD	OptiView Series III Integrated Network Analyzer Pro Gigabit with removable hard drive
Suites	
OPVS3-GIG/RHD/PSVS	Professional Vision Suite includes OPVS3-GIG/RHD (OptiView Series III Integrated Network Analyzer Pro Gigabit with removable hard drive), OPV-PE/PRO (OptiView Protocol Expert), OPV-RPTR/PRO (OptiView Reporter Pro) and OPVS3-ATE (OptiView Application Troubleshooting Expert)
OPVS3-GIG/PSVS	Professional Vision Suite includes OPVS3-GIG (OptiView Series III Integrated Network Analyzer Pro Gigabit), OPV-PE/PRO (OptiView Protocol Expert), OPV-RPTR/PRO (OptiView Reporter Pro), and OPVS3-ATE (OptiView Application Troubleshooting Expert)
OPVS3-GIG/PSVS/W	Professional Vision Suite includes OPVS3-GIG (OptiView Series III Integrated Network Analyzer Pro Gigabit), OPV-WNA4 (802.11 a/b/g/n Wireless Network Analysis Option), OPVS3-ATE (OptiView Application Troubleshooting Expert Option), OPV-PE/PRO (OptiView Protocol Expert and OPV-RPTR/PRO (OptiView Reporter Pro)
OPVS3-GIG/PSVS/S	Professional Vision Suite includes OPVS3-GIG (OptiView Series III Integrated Network Analyzer Pro Gigabit), OPV-WNA4 (802.11 a/b/g/n Wireless Network Analysis Option), OPVS3-ATE (OptiView Application Troubleshooting Expert Option), OPVS2-VOIP (Voice over IP option), OPV-PE/PRO (OptiView Protocol Expert) OPV-RPTR/PRO (OptiView Reporter Pro) and AnalyzeAir (Wi-Fi Spectrum Analyzer)
Options	
OPV-RPTR/PRO	OptiView Reporter Pro (40 devices)
OPV-RPTR	OptiView Reporter (1 device)
OPVS3-ATE	Application Troubleshooting Expert Option
OPVS3-WLIA	Wireless LAN Infrastructure Analysis Option
OPVS3-IPV6	IPv6 Infrastructure Analysis Option
OPVS2-VOIP	VoIP Analysis Option for OptiView Series II or Series III Integrated Network Analyzer
OPV-WNA4	OptiView Wireless Analysis Option 802.11 a/b/g /n for OptiView Series III Integrated Network Analyzer mainframe
OPVS3-WLESS	OptiView Wireless Suite includes OptiView Wireless Option 802.11 a/b/g /n, InterpretAir WLAN Site Survey Software and AnalyzeAir Wi-Fi Spectrum Analyzer

▶▶ OptiView® Series III Workgroup Analyzer

The OptiView Series III Workgroup Analyzer is a new approach to distributed network analysis, giving you the Network SuperVision™ you need on all seven layers, with the speed and simplicity your organization demands. The OptiView Series III Workgroup Analyzer allows you to monitor and analyze 10/100/1000 Ethernet networks right from your desktop. The workgroup analyzer can be located at the same site or at a remote site anywhere in the world creating a "virtual" presence for the analysis and troubleshooting of any segment of your enterprise network.

- Distributed analyzer integrates RMON2, SNMP device analysis, protocol analysis and active discovery for switched workgroups and VLANs
- Network information at a glance
- Gigabit support with standard 1000BASE-T copper and 1000BASE-SX fiber, optional 1000BASE-LX, 1000BASE-LX10 and 1000BASE-ZX fiber SFP's
- Supports up to eight remote users simultaneously

Model	Description
OPVS3-WGA/GIG	OptiView Series III Workgroup Analyzer Pro Gigabit (1000BASE-SX)
OPVS3-WGA/GIG/ DSVS	Distributed Vision Suite includes OPVS3-WGA/GIG (OptiView Series III Workgroup Analyzer), OPV-PE/PRO (OptiView Protocol Expert) and OPV-RPTR/PRO (OptiView Reporter Pro)
Options	
OPV-RPTR/PRO	OptiView Reporter Pro (40 devices)
OPV-RPTR	OptiView Reporter (1 device)
OPVS3-WLIA	Wireless LAN Infrastructure Analysis Option
OPVS3-IPV6	IPv6 Infrastructure Analysis Option

▶▶ OptiView Network Analyzer Accessories

OptiView Integrated and Workgroup Analyzer

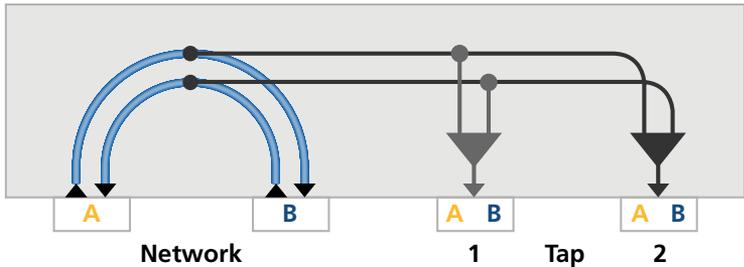| Model	Description
OPV-SFP-SX	850 nm, 50 and 63.5 micron multimode fiber 1000BASE-SX SFP adapter
OPV-SFP-LX	1300 nm, 10 micron single-mode fiber 1000BASE-LX SFP adapter
OPV-SFP-LX10	1300 nm, 10 micron single-mode fiber 1000BASE-LX10 SFP adapter
OPV-SFP-LX	1510 nm fiber 1000BASE-ZX SFP adapter
NFC Kit-Case	Fiber Optic Cleaning Kit

OptiView Integrated Network Analyzer

Model	Description
OPVS2-BP	External battery pack
OPVS2-KB	Mini USB keyboard
OPV-FT600	OptiView fiber inspector
OPV-HCASE	Hard carrying case
OPVS3-RHD	Removable hard drive for OPVS3-GIG/RHD
OPVS3-RHD/4	Pack of four removable hard drives for OPVS3-GIG/RHD

▶▶ **Aggregating In-line Taps**

Aggregating in-line taps install on network links between end point devices and combine full-duplex and redundant link traffic into a single port data stream, eliminating the need for multiple analysis solutions. All aggregating in-line taps have two or more monitor ports that replicate data for multiple analysis solutions. Network monitoring, security and analysis solutions gain clear, unobstructed visibility of link traffic and events by simply plugging into the tap. Media conversion in some models converts SX or LX fiber to BASE-T copper, or vice versa.

- Plug-and-play simplicity for fast analysis and deployment
- Decrease budget required for visibility on redundant links
- Single interface monitoring and analysis for full duplex links
- Dual link models are ideal for meshed trunk analysis using single port analysis devices
- Media conversion for Gigabit links expands the reach of your existing analysis solutions
- Eliminates the need for spanning resources and configurations

Model	Description
ATAP-100	Single-port dual output Copper aggregating tap 10/100 Mbps
ATAP-101	Copper 100 Mbps aggregating tap, 2 10/100 Mbps monitoring ports, passive, no injection
ATAP-102	Copper 10/100 Mbps aggregating tap, 2 10/100 Mbps monitoring ports, passive, no injection
ATAP-103	Copper 100 Mbps aggregating tap, 2 10/100 Mbps monitoring ports
ATAP-GIG-BT-BT	Single-port Copper aggregating tap, 10/100/100 Mbps, dual 1000BASE-T outputs
ATAP-GIG-BT-SX	Single-port Copper aggregating tap, 10/100/1000 Mbps, dual 1000BASE-SX outputs
ATAP-GIG-SX-BT	Single-port Fiber aggregating tap, dual 1000BASE-T outputs
ATAP-GIG-SX-SX	Single-port Fiber aggregating tap, dual 1000BASE-SX outputs
ATAP-GIG-LX-BT	1000BASE-LX fiber aggregating tap, dual 1000BASE-T outputs
ATAP-2000-BT-BT	Dual-port Copper aggregating tap, 10/100/1000 Mbps, dual 1000BASE-T outputs
ATAP-2001-BT-BT	Dual-port Copper aggregating tap, 1000 Mbps, dual outs, no injection
ATAP-2000-SX-SX	Dual-link 1000BASE-SX fiber aggregating tap, dual 1000BASE-SX monitor ports
ATAP-2000-LX-SX	Dual-link 1000BASE-LX fiber aggregating tap, dual 1000BASE-SX monitor ports

▸▸ AnalyzeAir™ Wi-Fi Spectrum Analyzer

Get instant vision into the physical layer of your wireless network allowing you to see the spectrum in a visible and intelligent format. AnalyzeAir lets you see, monitor, analyze, and manage all the RF sources and wireless devices that influence your Wi-Fi network's performance and security, even if those devices are unauthorized or transient.

- RF spectrum analysis for troubleshooting and optimizing 802.11a/b/g/n WLANs
- Real-time device detection and identification
- Device Finder that physically pinpoints the location of interfering devices
- Designed for IT network professionals who need answers, not just data
- Affordable, portable solution for use on a laptop/tablet PC or on the OptiView Integrated Network Analyzer
- Real-time spectrum analysis wherever you need it

Model number	Description
ANALYZEAIR	AnalyzeAir Wi-Fi Spectrum Analyzer includes AnalyzeAir PCMCIA card, omni antenna, directional antenna, antenna mounting kit and CD with application and user's manual
Suites	
IA-AA	IA-AA Wireless Software Suite includes InterpretAir WLAN Site Survey Software and AnalyzeAir Wi-Fi Spectrum Analyzer

▸▸ InterpretAir™ WLAN Site Survey Software

InterpretAir WLAN Site Survey Software is the tool you need to help you plan, deploy, verify, and expand your wireless LAN network. InterpretAir enables you to visualize multiple RF performance characteristics over a floor plan of your building, and provides for access point simulation to help you with planning to fill coverage gaps. InterpretAir automatically generates comprehensive performance documentation for historical reference and reporting. The unique RF Health feature lets you define your own baseline for WLAN performance and shows you where your WLAN meets or does not meet your network performance requirements, enabling faster analysis and decision making.

- Visualize WLAN signal strength and noise to optimize access point placement for seamless coverage
- Discover neighboring and rogue access points
- Document baseline coverage and performance data
- Define your own WLAN performance criteria, and let InterpretAir tell you where your WLAN meets or does not meet your expectations
- Simulate access points and be confident in your WLAN capacity expansion planning

Model	Description
INTAIR-LAP	Includes application software and users manual on CD
Suites	
IA-AA	IA-AA Wireless Software Suite includes InterpretAir WLAN Site Survey Software and AnalyzeAir Wi-Fi Spectrum Analyzer

Telecommunications Providers

Telecommunications Providers

Telephone 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. From the feature-rich TS®44 PRO Test Set with our patented DSL/POTS filtering technology to the basic TS®19 Test Set that combines basic test set features at an affordable price, our test sets deliver unparalleled quality, value, multi-functionality and ease-of-use.

Telephone Test Set Comparison

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

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

▶▶ **TS®40 Series Test Sets**

Our flagship TS40 Series test sets combine rugged DropSafe™, DataSafe™, waterproof durability with powerful testing capabilities.

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 high-impedance 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 RJ11 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

Visit **www.flukenetworks.com/EON** to sign up for additional information on a monthly basis.

▶▶ TS®22 Series Test Sets

The TS22 Series test sets' unique built-in one-way amplified speaker 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.

- TS®22 test set has an amplified speaker for hands-free monitoring
- TS®22A 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®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®25D 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 function. 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®1200 ADSL/POTS Test Set

The TS1200 ADSL/POTS test set lets technicians test ADSL while talking on the POTS frequencies of a line. It also allows off-hook testing of POTS lines without disrupting data services, reducing the need for separate testers. Includes DataSafe operation so technicians can clip onto a line in monitor mode, without disrupting existing data traffic.

- Ability to simultaneously test ADSL services and verify POTS lines
- ADSL verification functions including attainable bit rate, channel bit rate, maximum line capacity, attenuation, output power, noise margin
- Two ways to test ADSL: an automatic "snapshot" test for quick results, and a manual "monitor" test for up to 90 minutes of continuous testing
- Data Detection, Data Lockout, and Data Lockout Override in Talk mode
- Digital readout menu screens, including a "Home" button that allows access to all major testing modes and configuration functions from one screen
- Built-in two-way speakerphone for hands-free use

Model	Description
25800019	TS1200 ADSL/POTS test set with ABN
25800119	TS1200 ADSL/POTS test set, load coil detection version with ABN
25800124	TS1200 ADSL/POTS test set, load coil detection version with combi cord
P2583019	TS1200 linecord, ABN standard
P2583119	TS1200 linecord, ABN with loadcoil detection
P2583124	TS1200 linecord, 346A with loadcoil detection
P2584001	TS1200 power supply, 12VDC, 5%, 600MA

▶▶ 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
- 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

▶▶ 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

▶▶ 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.

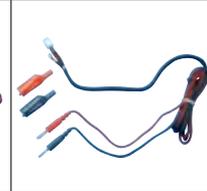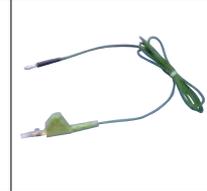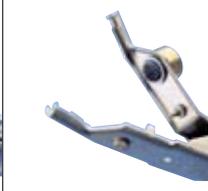| Model	Description
10210100	4-wire in-line modular adapter
10210101	4-wire in-line modular adapter with K-Plug
10220100	6-wire in-line modular adapter
10220101	6-wire in-line modular adapter with K-Plug
10230100	8-wire in-line modular adapter
10230101	8-wire in-line modular adapter with K-Plug

▶▶ 4-Wire Standard Modular Adapter

Test line status with the 4-wire 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

Model	Description
10113000	4-wire modular adapter

▶▶ Line Cords and Clips

P4480-009	**P4480-001**	**P4480-004**	**P4480RJ9**	**P3218-024**	**P3218-028**
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 RJ11 plug	Line cord with Straight Bed-of-Nails Clips	Line cord with Angled Piercing Pin Clips
Compatible with 40 Series	Compatible with 40 Series	Compatible with 40 Series	Compatible with 40 Series	Compatible with 20 Series	Compatible with 20 Series
P3218-231	**P3218-232**	**P3218-234**	**P3080-009**	**P1980-001**	**P1980-003**
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
P1980-007	**P1980-009**	**P3218-124**	**P3218-125**	**P3218-442**	**P2280-063**
Line cord with Ground Start cord	Line cord with Angled Bed-of-Nails Clips	Line Cord 471 A Plug with RJ11 Plug	Line Cord 471A Plug with 310 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 cord	Compatible with all, requires 346A Plug cord	Compatible with all, requires 346A Plug cord	Component for P3218-441 and P1980-007
P3218-200	**P3218-202**	**P4080-248**	**P4080-249**	**P3218-249**	Line cord boot only
Angled Piercing Pin, Pkg. 1 each	Angled Bed-of-Nails, Pkg. 1 each	Standard locking belt Clip	Belt Clip	Belt Clip	P3218-418 Black Boots (Pkg. 10)
					P3218-419 Green Boots (Pkg. 10)
Compatible with all	Compatible with all	Compatible with 40 series	Compatible with 40 series	Compatible with 19, 20, 30 series	P3218-420 Red Boots (Pkg. 10)

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 from Fluke Networks have 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 has powerful tools to help technicians get to the solution fast.

▶▶ MetroScope™ Service Provider Assistant

The new 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 Testing

Model	Description
MTSCOPE-KIT	MetroScope Kit including 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 and LinkReflector including 10/100/1000BASE-T port
MTSCOPE	MetroScope Mainframe including 10/100/1000BASE-T and 1000BASE-X SFP Port,AC adapter/battery charger, remote wiremap adapter, 128MB Compact-Flash card, Documentation CD, carrying case.
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
LRPRO-REFLCT	LinkRunner™ Pro Reflector
GLD-MTSCOPE	GOLD SUPPORT SERVICES 1-YR
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 activate MetroScope WLAN Option, printed English language Getting Started Guide and CD containing multi-language user manuals and other useful files
LRPRO-REFLCT-OPT	Reflector option for LinkRunner Pro
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 Carry Case for MetroScope and Accessories

▶▶ 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 to give you a clear vision or your local loop. 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. And that means top performance with fewer tools to carry. 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

Expedite Installation and Maintenance

CopperPro Series II makes fast work of installing and maintaining service. The one-button POTS Auto-Test quickly documents status before and after work is complete. The CopperPro also gives you a clear view of all the basic tests you need to ensure top performance, including:

- AC and DC voltage
- Loop current
- Circuit noise
- Balance and leakage
- CallerID/ANI

Plus, you can quickly run loss and slope tests with its automated dial-up testing, and use the built-in dial set with phone number storage. You can also verify xDSL connectivity, performance and capacity up to VDSL rates with optional xDSL golden modems.

Streamline Trouble Calls

Step-by-step instructions make CopperPro Series II a breeze to set up. Use the unique TDR Auto-Test to:

- Zero in on faults such as short bridge taps and shorted or open pairs
- Count and locate load coils
- Locate high-resistance faults precisely, no matter the cable makeup
- Easily identify the source of broadband interference and impulse noise, up to VDSL bandwidth

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
990-GM/2	ADSL/ADSL2/2+ Golden Modem Option for CopperPro Series II
990-GM/V-2	ADSL, ADSL2, ADSL2+, VDSL2 Golden Modem Option for CopperPro Series II

Access Network Test Equipment

▶▶ 990DSL CopperPro™ Loop Tester

The CopperPro loop tester offers a broad range of Plain Old Telephone Services (POTS) trouble-shooting, 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
990 DSL	CopperPro Loop tester
990DSLWT	Loop tester with wideband and TDR
990TL-SB	Test lead set (Spike and bed-of-nails)
990-CASE	Deluxe transport bag
GLD-990DSL	Gold Support

▶▶ CopperPro Terminator™ Far End Terminating Device

The CopperPro family of loop testers from Fluke Networks 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-RJ48 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, crossboxes 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 2000 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
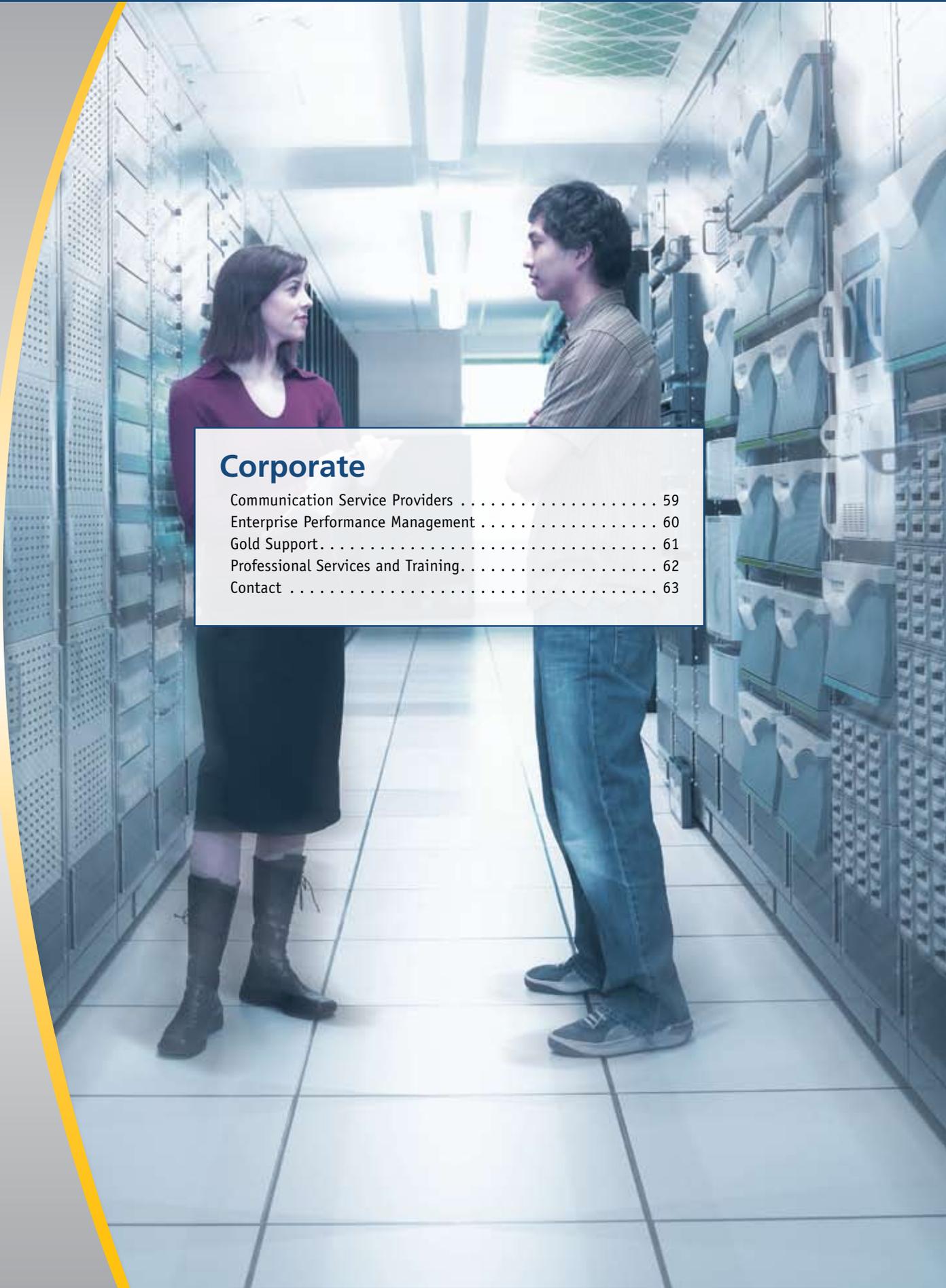
![FLUKE networks]

Corporate

▶▶ Communication Service Providers

Fluke Networks helps many of the world's leading communications service providers to build, manage and maintain their networks for high efficiency and performance. Our tools and systems are in service around the world, assisting with broadband network conditioning, facility maintenance and repair, troubleshooting, and the installation and maintenance for voice, video and data services.

Why are we different?

Only Fluke Networks brings together the deployment, maintenance, installation and operating support system solutions that deliver the business-transforming results you need to address the challenges ahead. We work closely with communication service providers to reduce operating expenses and maximize workforce productivity so they take maximum advantage of their investment in new technologies and services.

Solutions

Conditioning for Broadband Deployment

Fluke Networks is the world leader in network conditioning. Our NetDSL systems play a pivotal role in accelerating circuit qualification for ADSL and VDSL service deployment at the world's leading telecommunications service companies. And NetDSL ties that testing information back to central data systems, making it easy to market and deliver these new services to customers.

Access Network Maintenance

Our CopperPro and NetTech products help field technicians to troubleshoot and locate access network problems quickly and easily. Whether it's isolating cable problems, eliminating noise problems, or stress testing circuits prior to service installation, Fluke Networks has powerful tools to help technicians get to the solution fast.

Service Installation

Look at the tool belt of any technician and you are sure to find Fluke Networks installation tools and test sets. From market-leading dial sets to durable punchdown tools, Fluke Networks delivers professional quality to assure technicians can get the job done right...the first time.

Operating Support Systems

Fluke Networks is unique in its ability to tie together and automate the far-flung elements of today's access network. Solutions include automated job planning, trouble handling, records verification and centralized testing. In fact, Fluke Networks Predictor system tests 100 million telephone lines in the U.S. every day.

▶▶ Product Offerings

- DaVaR and NetDSL
- CopperPro Loop Testers/Analyzers
- CopperPro Series II VDSL/ADSL2 Golden Modems
- NetTech xDSL Field Verification
- Telephone Test Sets

- Punchdown Tools
- TDRs
- Toners/Probes
- Automated Trouble Handling
- Predictor
- MetroScope Carrier Ethernet Assistant

▶▶ Performance Management Solutions

Fluke Networks Performance Management solutions support IT professionals responsible for enterprise-wide application, network and VoIP performance. Our flagship solution, **Visual Performance Manager** is a comprehensive performance management system that provides broad network visibility and deep analysis views that help organizations to more effectively deploy, manage, solve and optimize application and network performance.

Why are we different?

Our versatile product offering provides software and hardware solutions for VoIP management, application performance and enterprise-wide network performance management unmatched in the industry. We are backed by Danaher, an $11 billion corporation with worldwide reach. As a certified Cisco Technology Developer Partner, Fluke Networks gives you valuable insight into Cisco infrastructure technologies and data sources.

Fluke Networks helps Cisco customers discover the power of Cisco IOS by utilizing technologies such as NetFlow, IP SLA, and Performance Routing (PfR), for in-depth forensic analysis, VoIP and application pre-assessment testing, proactive performance management and more. These software applications (NetFlow Tracker, ResponseWatch, PfR Manager) present NetFlow and IP SLA data in graphical format, making it easier to monitor and interpret network traffic, so your networks can be managed, secured and optimized for performance.

Solutions

Visual Performance Manager

A unified system that provides unparalleled breadth of visibility and depth of analysis to help organizations effectively deploy, manage, solve and optimize the delivery of enterprise applications.

Visual Performance Manager is maintained on a centralized server and pulls data from a wide range of data sources to give each user customized, actionable views for their unique needs.
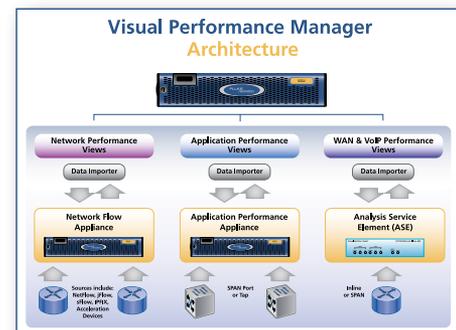
Visual Performance Manager provides IT organizations with superior visibility to more effectively optimize application, VoIP and network performance management.

Visual Performance Managers architecture allows integration of multiple data sources and any web accessible application

Application Performance: Monitor critical n-tier applications, troubleshoot end-user performance problems, isolate problem sources and domain, and receive intelligent alarms

VoIP Performance: Assess VoIP readiness and optimize VoIP performance

Network Performance: Gain insight into how traffic usage is impacting network performance

For more information on Visual Performance Manager, visit **www.flukenetworks.com/vpm**.

▸▸ Network SuperVision Gold Programs

Fluke Networks Gold membership programs ensure a high return on your investment by keeping your Fluke Networks products up to date and in top condition. The programs are paid annual service contracts that include the following general benefits: 24/7 technical support, knowledge base access, members-only discounts, access to online training, and up-to-the-minute information on your product; everything you need to reduce your total cost of ownership.

Gold Product Support

Gold Product Support, Fluke Networks' annual membership technical support program, ensures that you are never without an up-to-date, calibrated tester in full working order. Gold Product Support keeps you and your team operating at peak efficiency, allowing you to get the full benefit from your Fluke Networks equipment, thus improving ROI. This program includes free repairs to your tester and a loan unit during repair, replacement of failed accessories, software/ firmware updates, and free annual calibration/performance verification.

Gold Software Maintenance

Gold Software Maintenance is available for Fluke Networks software products, and ensures your software remains up-to-date and functional. Gold Software Maintenance provides you with software upgrades and hot-fix software deliveries at no charge. Minor 'dot' releases, major 'base' releases, and occasional 'hot-fix' updates are covered.

Gold Hardware Maintenance

Gold Hardware Maintenance is currently available for selected Fluke Networks products, and provides on-site repairs or an exchange unit according to the service level agreement you contract with us. We offer many different maintenance options in order to meet your hardware recovery needs, some of which include an on-site technician who will get you back up to speed and running as soon as possible.

Upon purchase of a Gold Program contract, you'll receive a unique Gold Support membership number and PIN for secure access to our web site and technical support. Find more information at **www.flukenetworks.com/goldsupport** to understand how our Gold Support Programs keep you and your team operating at peak efficiency, allowing you to get the full benefit from your Fluke Networks equipment.

▸▸ Gold Program entitlements

- Repair services
- Loaner units during repairs
- Accessory replacement
- 24/7 technical support
- Local language support
- Online training access

- Calibration or performance verification
- Members-only discounts
- Knowledge base access
- Software upgrades
- Software hot-fixes

▸▸ Professional Services and Training Opportunities

No one understands the challenges and environments of networking professionals like Fluke Networks. That's why we've created a suite of training solutions from custom on-site training and instructor-led courses to self-guided online training and webinars to match the varying needs, work models and experience levels of each user. Visit **www.flukenetworks.com/training** for full details.

Maximize your return on investment

Fluke Networks professional services and training programs mean maximum flexibility while increasing your return on investment in equipment and people. From our one-day on-site training and certification program to improve installer skills in testing, certifying, and troubleshooting copper and fiber optic cabling systems to our on-site professional services engagements to assist in design and installation of our tools, or troubleshooting existing stubborn network issues, Fluke Networks professional services and training opportunities help your company get the most out of your network tools.

Consider a training course if you currently own or plan to purchase any Fluke Networks tools. These classes are scheduled around the world in key cities, or we can bring them to your location and customize them to meet your product mix and specific educational needs. We can also create a custom on-site class or electronic training tool to specifically cover the technology, features, and functionality your team needs to maintain your network.

Our classes are taught by specially qualified Fluke Networks experts, so your staff may earn continuing education credits such as BICSI and a certificate of completion, enhancing their skill set and increasing their value to your organization. Visit **www.flukenetworks.com/training** today to review specific course outlines and discover the local contact in your area.

Fluke Networks On-site Certification Course

Fluke Networks helps you realize the full value of your installation and troubleshooting teams with industry-leading Certified Cabling Test Technician (CCTT) courses. This course help your department stay competitive in the installation and certification of high-speed structured cabling systems. Fluke Networks' training staff offers expert classroom training and extensive hands-on experience with our latest products.

▸▸ Professional Services and Training Benefits

- Industry-leading courses
- Stay competitive
- Enhance team skill set
- Affordable pricing
- Onsite or offsite

- BICSI credits
- Certificate of completion
- Learn industry standards
- Understand inferior cabling
- Speed deployment times

▶▶ Contact Us

Contact information by department

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Worldwide:
1-425-446-4519

▶▶ **For general questions, information and feedback, please visit: www.flukenetworks.com/contact**
For information on local sales offices, please visit: www.flukenetworks.com/worldwide

▶▶ What's new from Fluke Networks

MicroMapper Pro VDV Cable Tester

- Verifies voice/data/video cable wiremap with a "quick-check" test
- Tests twisted pair and coax connectors without adapters
- Locates cables with built-in analog toner
- Accurate, clean and consistent cuts and terminations
- Identifies cables with up to eight optional cable IDs

See page 13 for additional information.

SimpliFiber® Pro Optical Power Meter and Fiber Test Kits

- Cuts testing time in half with dual-wavelength testing capability; ability to save both measurements to one record and LinkWare™ compatibility streamlines documentation process
- New CheckActive™, Min/Max, and FindFiber™ features exclusive to SimpliFiber Pro make expert testing simple
- Various kit configurations provide complete fiber verification, inspection, and cleaning solutions for all fiber testing and first-line troubleshooting needs

See page 22 for additional information.

MetroScope™ Service Provider Assistant

- New V.2 Software delivers ProVision™ testing. It 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 unit, saving up to 40%.

See page 54 for additional information.

Your authorized Fluke Networks distributor