



SimpliFiber® Pro and FiberInspector Mini

Fiber Optic Power Meter and Video Inspection Kits for Industrial Ethernet

The only way to accurately verify the performance of your fiber-optic Ethernet network is to test with equipment designed for the job. The SimpliFiber Pro Optical Power Meter Test Kits and Fiber Inspection & Cleaning Tools are a suite of affordable and easy to use fiber verification test solutions.

Control Engineers and Plant Engineers are responsible for entire production and process networks. Tasks, such as quickly resolving basic connectivity problems and preventing small problems from escalating into other areas of a network, are critical. When the network is over fiber, making sure the power levels are sufficient, polarity is correct, and connectors and patch cables are clean, is imperative to less downtime in any industrial environment.

Fluke Networks' Fiber Kits are the solution. Whatever your particular needs are, Fluke Networks provides you with a convenient kit configuration to ensure your fiber links don't bring your production network down.



Count on Industrial Ethernet Fiber Kits for:

- Locating faults including tight bends, breaks, and bad connectors
- Determining if the polarity is correct
- Easily verifying and identifying individual fibers
- Accelerating end-to-end fiber checks
- Verifying loss and power levels for both singlemode and multimode fiber links
- Ensuring smooth, clean fiber connector end-faces with video inspection
- Managing and downloading test results for archiving or regulation reporting

A system approach

The Industrial Ethernet Fiber Kits are a suite of inspection, cleaning, and troubleshooting tools that allow you to combine multiple easy-to-use products and functionality to match your ever-changing needs. SimpliFiber Pro Kits include one or more of Fluke Networks' unique fiber platforms: the power meter, the multimode source, the singlemode source, the FindFiber™ Remote ID source, VisiFault Visual Fault Locator, FiberInspector Mini and Fiber Optic Cleaning Kits.

Each fiber test tool has uniquely competitive features, to meet the needs of today's control and plant engineers.

The optical power meter is included in all kits and is calibrated for accuracy at six different



wavelengths (850, 1300, 1310, 1490, 1550, and 1625). The meter can save a reference power level, allowing a direct display of fiber loss. It also has an intuitive four-button panel, a large LCD display screen, and a serial USB port. The meter's single connector permits simple network connection and straightforward reference power measurement. Interchangeable connector adapters are available in the most popular industrial environment connector styles.

User-friendly

Although they are effective as separate tools, the SimpliFiber Pro optical power meter and sources are engineered to work together. The automatic wavelength-sensing feature of the meter identifies the source wavelength and sets itself appropriately so you do not have to. This simplifies multi-wavelength tests and saves at each wavelength to prevent costly measurement errors. The compact SimpliFiber Pro optical power meter and sources are durable and rugged. They feature textured, impact-resistant covers and a compact, ergonomic shape for a comfortable and secure grip. Long battery life assures hours of trouble-free operation.



Verify and locate faults

Diagnose and repair simple fiber link problems with Fluke Networks' VisiFault™ Visual Fault Locator (VFL). The laser-powered VisiFault locates fibers, verifies continuity and polarity, and helps find breaks in cables, connectors, and splices. Its continuous and flashing modes make for easier identification. The VisiFault is compatible with 2.5 mm and 1.25 mm (with optional adapter) connectors for easy connection.

Reporting made simple

Fluke Networks' solutions enable you to easily manage test results, print professional reports, or export data into spreadsheet formats. SimpliFiber Pro can internally store up to 1000 test results which can then be uploaded to your PC using the included LinkWare™ Cable Test Management Software.

Ensure smooth, clean fiber connections

Inspect the ends of fiber-optic connectors with Fluke Networks' handheld FiberInspector™ Mini video microscope or FiberViewer™ microscopes. All options ensure your termination is smooth, clean, and ready for optical transmission. The FT525 FiberInspector Mini can be used in any live fiber installation, provides 200x viewing and includes cleaning supplies.

Eliminate the #1 cause of fiber failure

In a survey fiber network owners commissioned by Fluke Networks, end-face contamination was found to be the leading cause of fiber failures. Dirt and contaminants cause insertion loss and back-reflection that inhibit the light transmission and causes havoc with transceivers. And because dirt can migrate from one end-face to another upon mating, both sides of any connection must be inspected. Further, mating contaminated connectors can cause permanent damage as microscopic debris is crushed between end-faces in physical contact. Therefore, you must always inspect and clean before mating as a preventative measure and not only after experiencing problems. Even factory-terminated patch cords or pigtails must be inspected as protective caps do not keep end-faces clean. Avoiding this common cause of failure starts with inspecting the end-face and eliminating any contamination before insertion into a bulkhead or piece of equipment.

Proper cleaning of contaminants

Once end-face contamination is discovered, proper procedures are required to eliminate it. Shirtsleeves are not acceptable! In fact, improper cleaning processes are not only ineffective, but also potentially damaging.

Proper fiber optic end-face cleaning involves two key components: specialized solvent and lint-free wipes or swabs.

Clean wet and finish dry

Always use proper solvent in conjunction with either a wipe for a patch cord or a swab for a port. Solvent is required to dissolve any one of the many contaminants that may be present, such as finger oil or buffer gel. Further, wiping an end-face with just a dry wipe or swab can generate static electricity that draws more dust out of the air onto the end-face. Even worse, a dry wipe can drag debris across the end-face causing damage. Effective solvents will act as a lubricant for the safe removal of debris. Conversely, using too much solvent or only a wet application will result in the leftover solvent drying out and leaving behind the dissolved contaminants as a residue. The best practice is to clean wet and finish dry. After cleaning, always inspect the end-face again before insertion to guarantee all contaminants were removed. If necessary, repeat your cleaning steps to remove any lingering soils not removed by the first cycle.

SimpliFiber Pro Fiber Test Kits	SimpliFiber Pro Power Meter and Multimode 850/1300 Source	SimpliFiber Pro Power Meter and Singlemode 1310/1550 Source	VisiFault Visual Fault Locator	FT525 FiberInspector Mini and Cleaning Kit	Carrying Case	Accessories
FTK1450-IE – Complete Fiber Verification Kit	✓	✓	✓	✓	✓	✓
FTK1000-IE – Basic Fiber Verification Kit	✓				✓	
FT525-IE – FiberInspector Mini and Cleaning Supplies				✓	✓	✓



General Specifications	
Temperature range	Operating: -10 °C to 50 °C Storage: -20 °C to 50 °C
Humidity range	95% (10 °C to 35 °C) non-condensing; 75% (35 °C to 40 °C) non-condensing; uncontrolled <10 °C
Certifications	CE, CSA, N10140, Class 1 laser-safe
Dimensions	Power meter: 6.4 in x 3.2 in x 1.5 in (16.5 cm x 8.0 cm x 3.9 cm) MM/SM sources: 5.6 in x 3.2 in x 1.6 in (14.2 cm x 8.1 cm x 4.1 cm)
Weight	Power meter: 11.5 oz (325 g) MM/SM sources: 9.8 oz (278 g)
Optical Sources	
Optical output connector	Fixed SC
Emitter type	850/1300: LED 1310/1550: FP Laser FindFiber: Laser
Emitter wavelengths	850, 1300, 1310, 1490, 1550, 1625
Power output (minimum)	MM: ≥ -20 dBm SM: ≥ 8 dBm minimum; -7 dBm nominal
Power output stability (8 hours)	MM: +/- 0.1 dB over 8 hours SM: +/- 0.25 dB over 8 hours
MM battery life (2 x AA IEC LR6)	40 hours typical
SM battery life (2 x AA IEC LR6)	30 hours typical
FindFiber battery life (2 x AA IEC LR6)	80 hours typical
Optical Power Meter	
Power measurement accuracy	+/-0.25 dB
Optical connector	Removable adapter; SC adapter standard; Optional adapters include LC, ST
Detector type	InGaAs
Calibrated wavelengths	850, 1300, 1310, 1490, 1550, 1625
Power measurement range	850: 10 to -52 dBm 1300, 1310, 1490, 1550, 1625: 10 to -60 dBm
Power measurement linearity	850 nm: +/- 0.2 dB; +/- 0.2 dB for power from 0 dBm to -45 dBm, +/- 0.25 dB for power < -45 dBm; 1300 nm, 1310 nm, 1490 nm, 1550 nm, 1625 nm: +/- 0.1 dB; +/- 0.1 dB for power from 0 dBm to -55 dBm, +/- 0.2 dB for power > 0 dBm and < -55 dBm
Resolution	0.01 dB
Battery life	>50 hours typical
Memory	1000 loss or power measurements
Serial communication physical interface	USB

Model	Description
FTK1450-IE	Complete Fiber Verification Kit with FT525 FiberInspector Mini: Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, 1310/1550 singlemode source, VisiFault VFL, FT500 FiberInspector Mini, two (2) FindFiber Remote ID sources, and carrying case; ST and LC adapter, NFC-Kit-Box fiber optic cleaning kit
FTK1000-IE	Basic Fiber Verification Kit: Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, and carrying case
FT525-IE	FiberInspector Mini and Cleaning Kit – Includes FiberInspector Mini; complete cleaning supplies (cleaning cube, ten cleaning cards, solvent pen, 2.5mm port cleaning swabs and 1.25mm port cleaning swabs) and soft carrying case
GLD-FTK	Gold Support package for SimpliFiber Pro



*FT525-IE
FiberInspector Mini
and Cleaning Kit*

*FTK1000-IE
Basic Fiber
Verification Kit*

*FTK1450-IE
Complete Fiber
Verification Kit*

NETWORK SUPERVISION

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