

# SimpliFiber® Pro

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## Overview

### SimpliFiber Pro makes testing simple

Fluke Networks' SimpliFiber® Pro Optical Power Meter incorporates new and innovative features to give technicians a tool that performs and reports test results like no other first-line fiber test tool can.

The only way to accurately test and verify the performance of your fiber-optic network is with test equipment designed for the job. The SimpliFiber® Pro Optical Power Meter and Fiber Test Kits is a suite of affordable and easy-to-use **fiber verification test** solutions. Today's high bandwidth premise networks heavily rely on fiber-optic infrastructure. Proper installation and maintenance of fiber cabling is imperative to improve technician productivity and ensure cabling system performance.



## See how Fluke Networks' suite of innovative installation and test solutions improves technician productivity and ensures cabling system performance

SimpliFiber Pro is an improved fiber test set that simplifies and shortens the front-line testing process by:

- Reducing the multiple steps and using a simultaneous dual-wavelength testing feature to measure the range of power levels in just half the time
- Allowing for a non-touch solution to check for a live fiber without having to plug into ports
- Enabling a network technician to do time-consuming procedures that normally require a team

SimpliFiber Pro Optical Fiber Test Kits provide you with all the tools you need to help you verify proper installation and maintain fiber-optic cabling systems.

## A system approach

## User-friendly

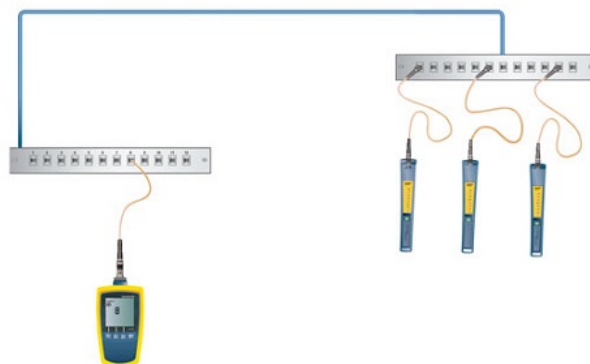
## Verify optical loss and power levels

## Conduct pre-testing with minimal resources

The diagram shows a patch panel with 16 ports. A SimpliFiber Pro meter is connected to port 1. Three patch cords are connected to ports 2, 3, and 4, and are labeled ID #3, ID #4, and ID #5 respectively. The patch cords are connected to wall outlets.



Figure 1 – Using FindFiber mode to locate fibers – patch panel to wall outlet



## Ensure smooth, clean fiber connections

The FI-500 FiberInspector™ Micro removes the hassle associated with inspecting fiber end faces, especially in low light and high cable density situations. It is very simple to use: Simply plug the cable into the FI-500 and touch the AF button. Within seconds, the fiber endface comes into sharp, clear view. And if you're working in a difficult to reach place or you can't get the image to stand still, just touch the pause button to freeze the image.- PortBright™ illumination to see ports in dark and dense panels.

- Autofocus for stable images in a few seconds
- Large display to view single mode and multimode fiber end faces
- Auto-center moves the fiber ferule clearly into the frame for precision inspection
- Includes 4 UPC tips (LC, SC, 1.25 mm and 2.50 mm). APC and ARINC 801 tips are also available

## 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. Continuous and flashing modes make for easier identification. Compatible with 2.5 mm and 1.25 mm (with optional adapter) connectors for easy connection.

## Reporting made simple

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.

### Features

- Dual-wavelength testing
- CheckActive™

- FindFiber Remote ID
- Auto wavelength
- USB port
- Saves 1000 results
- Min/max
- Six calibrated wavelengths



| Feature                 | Description                                                                                                                      | Benefit                                                                                                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dual-wavelength testing | Simultaneously test and save records from two wavelengths                                                                        | Cuts testing time in half by eliminating the need to test at each wavelength separately                                                                                              |
| CheckActive™            | Connect to a fiber without any setup and show with a <b>simple icon</b> and an <b>audible tone</b> whether that fiber is active. | Know for sure if connectors and ports are live. Allows quick visual and audible identification of a live link or port on a switch                                                    |
| FindFiber Remote ID     | Identify the physical location of cabling runs to ensure polarity and the correct location on                                    | Allows for quick and easy cable-routing identification and reduces confusion. <b>Allows double-ended testing with only 1 technician.</b> Ideal for pre-testing a job site before any |

|                            |                                                                                         |                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | each fiber drop. Encoded source signal 1-8                                              | adds, moves, or changes. Allows for mapping verification and easy documentation.                                                                                              |
| Auto wavelength            | Automatic identification of wavelength being transmitted                                | Eliminates time-consuming mistakes by automatically detecting which source wavelength is transmitting. Allows measurements from both wavelengths at to be saved in one record |
| USB port                   | Data connectivity via USB 2.0                                                           | Download results faster – no specialty cables required                                                                                                                        |
| Saves 1000 results         | Save and label each test conducted                                                      | Collects test results from multiple building sites in a day and <b>requires only one download</b>                                                                             |
| Min/max                    | Allows immediate access to power range highs and lows in a testing session              | <b>Precisely identifies intermittent power fluctuations.</b> Eliminates unreliable and inaccurate guesswork.                                                                  |
| Six calibrated wavelengths | Calibrated to extend from typical enterprise wavelengths to two new popular wavelengths | Power meter can be used for broader applications, including FTTx testing                                                                                                      |

## Copper and Fiber Basic Technician's Kit

As project requirements grow to include both copper and fiber cabling, the Copper and Fiber Basic Technician's Kit (MS2-FTK) provides the right set of tools to manage your network and keep it running smoothly. Along with the features of the SimpliFiber Pro, the MS2-FTK provides the copper testing instruments needed to:

- Graphically display wiremap, cable ID, and distance to fault on one screen
- Length of each pair
- Built in Analog and Intellitone digital toner
- Test all common copper media types including RJ11, RJ46, Coax, with no need for adapters
- Locate virtually any cable or wire pair with IntelliTone™ digital and analog toning
- Verify today's media services, including 10/100/1000 Ethernet, POTS, and PoE



|                           | FTK1000 | FTK2000 | FTK2100 | FTK1200 | FTK1375 | FTK1475 | MS2-FTK |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|
| Power Meter               | X       | X       | X       | X       | X       | X       | X       |
| 850/1300 Multimode Source | X       |         |         | X       | X       | X       | X       |

|                                                          |      |      |      |      |      |      |      |
|----------------------------------------------------------|------|------|------|------|------|------|------|
| 1310/1550 Singlemode Source                              |      | X    | X    |      |      | X    |      |
| 1490/1625 Singlemode Source                              |      |      | X    |      |      |      |      |
| Visifault VFL                                            |      |      |      | X    | X    | X    |      |
| FI-500 FiberInspector Micro                              |      |      |      |      | X    | X    |      |
| Inspection Probe Tips (LC,SC,1.25mm and 2.5mm Universal) |      |      |      |      | X    | X    |      |
| Findfiber Remote ID Source                               |      |      |      | X    | X    | X(2) |      |
| SC Power Meter Adapter                                   | X    | X    | X    | X    | X    | X    | X    |
| ST Power Meter Adapter                                   |      |      |      | X    | X    | X    |      |
| LC Power Meter Adapter                                   |      |      |      | X    | X    | X    |      |
| Magnetic Strap Attachment                                | X(2) | X(2) | X(3) | X(2) | X(3) | X(4) | X(3) |
| Carrying Case                                            | X    | X    | X    | X    | X    | X    | X    |
| NFC-KIT-BOX Fiber Cleaning Kit                           |      |      |      |      |      | X    |      |
| Microscanner 2                                           |      |      |      |      |      |      | X    |

## Specifications

| 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                                                                                                                                                                                                                                              |

| Microscanner2 Specifications (Included in MS2-FTK kit) |                                                                                                                     |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Test Connectors                                        | Twisted-pair: UTP, FTP, SSTP 8-pin modular jack accepts RJ45 and RJ11 Coax: F-connector for 75 Ω, 50 Ω, 93 Ω cables |
| Cable Tests                                            | Tests for open circuits, short circuits, cross-wired pairs, wiremap to TIA-568A/B standards, remote ID locators     |
| Length Measurement                                     | Length (up to 460 meters or 1,500 feet) using Time Domain Reflectometry (TDR) Technology                            |
| Tone Generator                                         | IntelliTone digital tone: [500 KHz]; analog tones:[400Hz, 1KHz]                                                     |
| PoE Detection                                          | Solicits and detects the presence of 802.3af compatible PoE devices                                                 |
| Ethernet Port Test                                     | Advertised speed of 802.3 Ethernet ports (10/100/1000)                                                              |

|              |                                                    |
|--------------|----------------------------------------------------|
| Power Source | Battery type: 2 AA alkaline batteries              |
| Dimensions   | 3 in x 6.4 in x 1.4 in (7.6 cm x 16.3 cm x 3.6 cm) |
| Weight       | 13 ounces; 363 grams (batteries included)          |
| Warranty     | One year                                           |

## M12/ RJ45 Cable Specifications:

|                                   |                                                                                                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Cable type                        | Ethernet cable, Cat5e, 6, 6a, shielded, 2 Pair AWG 26 stranded (7 wire), RAL 5021 (water blue), M12 4 pos. D- coded on RJ45 connector |
| Number of positions               | 4                                                                                                                                     |
| Fixed cable length                | 2m                                                                                                                                    |
| Volume resistance                 | $\leq 5 \text{ m}\Omega$                                                                                                              |
| Insulation resistance             | $\geq 100 \text{ M}\Omega$                                                                                                            |
| Ambient temperature               | -20 oC to 50 oC                                                                                                                       |
| Inflammability class acc to UL 94 | V0                                                                                                                                    |
| Surge voltage category            | II                                                                                                                                    |
| Pollution degree                  | 3                                                                                                                                     |
| Degree of protection              | IP20/IP67                                                                                                                             |
| External cable diameter           | 6.7 mm                                                                                                                                |
| Transmission characteristics      | Cat 5 (IEC 11801:2002), Cat 5e (TIA 568B:2001)                                                                                        |

## Ordering Information

### SimpliFiber Pro Kit Ordering Information

| Model              | Description                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|
| SFPOWERMETER       | SimpliFiber Pro optical power meter                                                                                      |
| SFMULTIMODESOURCE  | SimpliFiber Pro multimode 850/1300 source                                                                                |
| SFSINGLEMODESOURCE | SimpliFiber Pro singlemode 1310/1500 source                                                                              |
| SFSINGLEMODE2      | SimpliFiber Pro singlemode 1490/1625 laser light source                                                                  |
|                    | Multimode Fiber Verification Kit: Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, VisiFault VFI |

|             |                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FTK1000     | Multimode Fiber Verification Kit includes SimpliFiber Pro optical power meter, 850/1300 multimode source, FT120 FiberViewer, FindFiber Remote ID sources, Magnetic Strap attachments, and carrying case; ST and LC adapter                                                                                                                                                    |
| FTK1200     | Multimode Verification Kit: Includes SimpliFiber Pro Optical power meter, 850/1300 multimode source, VisiFault VFL, FindFiber Remote ID sources, Magnetic Strap attachments, and carrying case; ST and LC adapter                                                                                                                                                             |
| FTK1375     | Multimode Fiber Verification Kit with FI-500 FiberInspector Micro – Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, VisiFault VFL, FI-500 FiberInspector, FindFiber Remote ID source, Magnetic Strap attachments, and carrying case; SC, ST, and LC power meter adapters.                                                                            |
| FTK1475     | Complete Fiber Verification Kit with FI-500 FiberInspector Micro – Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, 1310/1550 singlemode source, VisiFault VFL, FI-500 FiberInspector, two (2) FindFiber Remote ID sources, Magnetic Strap attachments, and carrying case; SC, ST, and LC power meter adapters, NFC-KIT-BOX fiber optic cleaning kit. |
| FTK2000     | Singlemode Fiber Verification Kit: Includes SimpliFiber Pro optical power meter, 1310/1550 singlemode source, Magnetic Strap attachments, and carrying case                                                                                                                                                                                                                   |
| FTK2100     | Singlemode Fiber Verification Kit: Includes SimpliFiber Pro optical power meter, 1310/1550 and 1490/1625 singlemode sources, Magnetic Strap attachments, and carrying case                                                                                                                                                                                                    |
| MS2-FTK     | Includes MicroScanner2 Cable Verifier with main wiremap adapter, SimpliFiber Pro optical power meter, 850/1300 multimode source, SC power-meter adapter, multi-language Getting Started Guide, batteries, Magnetic Strap Attachments, and carrying case                                                                                                                       |
| FindFiber   | One (1) FindFiber Remote ID source                                                                                                                                                                                                                                                                                                                                            |
| FindFiber-6 | Set of six (6) FindFiber Remote ID sources                                                                                                                                                                                                                                                                                                                                    |

#### SimpliFiber Pro Accessories Ordering Information

| Model              | Description                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------------------------------|
| MRC-50-EFC-SCLC-M  | Multimode Encircled Flux compliant test reference cord (2m) for testing 50 µm LC terminated fibers (SC/LC) - Metal   |
| MRC-50-EFC-SCFC    | Multimode Encircled Flux compliant test reference cord (2m) for testing 50 µm FC terminated fibers (SC/FC)           |
| MRC-50-EFC-SCST    | Multimode Encircled Flux compliant test reference cord (2m) for testing 50 µm ST terminated fibers (SC/ST)           |
| MRC-50-EFC-SCSC    | Multimode Encircled Flux compliant test reference cord (2m) for testing 50 µm SC terminated fibers (SC/SC)           |
| MRC-625-EFC-SCLC-M | Multimode Encircled Flux compliant test reference cord (2m) for testing 62.5 µm LC terminated fibers (SC/LC) - Metal |
| MRC-625-EFC-SCFC   | Multimode Encircled Flux compliant test reference cord (2m) for testing 62.5 µm FC terminated fibers (SC/FC)         |
| MRC-625-EFC-SCST   | Multimode Encircled Flux compliant test reference cord (2m) for testing 62.5 µm ST terminated fibers (SC/ST)         |
| MRC-625-EFC-SCSC   | Multimode Encircled Flux compliant test reference cord (2m) for testing 62.5 µm SC terminated fibers (SC/SC)         |
| SRC-9-SCLC-M       | Single-mode test reference cord (2m) for testing 9 µm LC terminated fibers (SC/LC) - Metal                           |
| SRC-9-SCFC         | Single-mode test reference cord (2m) for testing 9 µm FC terminated fibers (SC/FC)                                   |
| SRC-9-SCST         | Single-mode test reference cord (2m) for testing 9 µm ST terminated fibers (SC/ST)                                   |

|               |                                                                                    |
|---------------|------------------------------------------------------------------------------------|
| SRC-9-SCSC    | Single-mode test reference cord (2m) for testing 9 μm SC terminated fibers (SC/SC) |
| NFA-LC-SINGLE | LC interchangeable adapter                                                         |
| NFA-FC-SINGLE | FC interchangeable adapter                                                         |
| NFA-ST-SINGLE | ST interchangeable adapter                                                         |
| NFA-SC-SINGLE | SC interchangeable adapter                                                         |
| MS2-MAG-KIT   | Magnetic Strap attachment and spare holster                                        |

## About Fluke Networks

Fluke Networks is the worldwide leader in certification, troubleshooting, and installation tools for professionals who install and maintain critical network cabling infrastructure. From installing the most advanced data centers to restoring service in the worst weather, our combination of legendary reliability and unmatched performance ensure jobs are done efficiently. The company's flagship products include the innovative LinkWare™ Live, the world's leading cloud-connected cable certification solution with over fourteen million results uploaded to date.

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1-425-446-5500 (International)

<http://www.flukenetworks.com>

Descriptions, information, and viability of the information contained in this document are subject to change without notice.

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