

# Datasheet: SimpliFiber® Pro Fluke Networks SImplifiber Pro Specs Provided by www.AAATesters.com

# **Datasheet: SimpliFiber® Pro**

# 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 otherfirstline 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. Available in kits or a la carte, these tools are simple and effective and provide you with the capability to measure loss and power levels, locate faults and polarity issues, and inspect connector end-faces.

# A system approach

SimpliFiber Pro is a product suite that allows you to match products and functionality to your needs. SimpliFiber Pro is made up of five unique fiber platforms: the power meter, the multimode source, two singlemode sources, and the FindFiber™ Remote ID source. Each platform has uniquely competitive features, bundled in convenient kits, to meet the needs of today's technicians.

The optical power meter is included in all kits and is calibrated for accuracy at six different wavelengths (850, 1300, 1310, 1490, 1550, 1625). The meter features the ability to 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 port. The meter's single connector permits simple network connection and straightforward reference power measurement. Interchangeable connector adapters are available in the most popular connector styles.



The multimode source is a dual wavelength 850/1300 source and incorporates an 850 nm LED and a 1300 nm LED, perfect for multimode fiber testing. You can add an optional singlemode 1310/1550 and/or 1490/1625 source to any kit as your testing needs evolve. These laser sources are ideal for all singlemode fiber testing. All sources are compatible with the SimpliFiber Pro optical power meter.

## **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 impact-resistant covers and a compact, ergonomic shape for a comfortable and secure grip. Long battery life assures hours of trouble-free operation.

## Verify optical loss and power levels

The SimpliFiber Pro optical power meter is calibrated for accuracy at 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm. The meter features the ability to save a reference power level, allowing a direct display of fiber loss. It has an intuitive four-button panel, a large LCD display screen, and a USB port to upload test results to a PC running LinkWare™ Cable Test Management Software. SimpliFiber Pro sources include a dual-wavelength 850/1300 nm source, a dual-wavelength 1310/1550 nm source, and a dual-wavelength 1490/1625 nm source. The FindFiber Remote ID sources transmit at 1310 nm.



# Conduct pre-testing with minimal resources

The FindFiber Remote ID source is a new platform in the Fluke Networks family. When used with the optical power meter, these remote ID sources allow for quick and easy cable-routing identification.

The FindFiber remote ID sources allow you to identify the physical location of cabling runs to ensure polarity and the correct location on each fiber drop (Figure 1 and Figure 2). This time-saving feature enables a single technician to quickly perform double-ended testing – ideal for pre-testing a job site before any adds, moves, or changes.

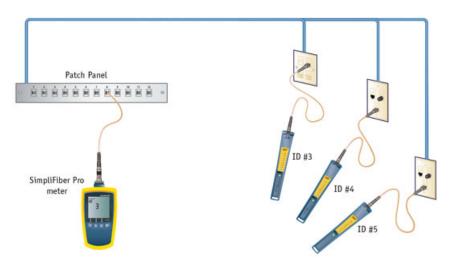
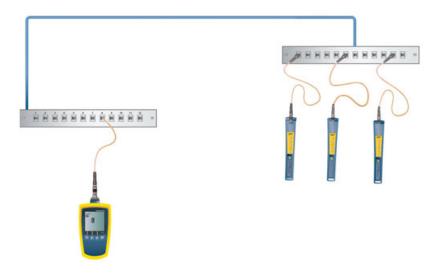


Figure 1 – Using FindFiber mode to locate fobers – patch panel to wall outlet



#### 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 each fiber drop. Encoded source signal 1-8 | Allows for quick and easy cable-routing identification and reduces confusion.  Allows double-ended testing with only 1 technician. Ideal for pre-testing a job site before any 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   | Precisely identifies intermittent power fluctuations. 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  |













FTK2000



FTK2100

FTK1200

FTK1375

FTK1475



# 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



MS2-FTK



|  | FTK1000 | FTK2000 | FTK2100 | FTK1200 | FTK1375 | FTK1475 | MS2-FTK |
|--|---------|---------|---------|---------|---------|---------|---------|
| Power Meter  | Х       | Х       | ×       | ×       | х       | х       | x       |
| 850/1300 Multimode Source                                | х       |         |         | х       | х       | х       | Х       |
| 1310/1550 Singlemode Source                              |         | х       | х       |         |         | х       |         |
| 1490/1625 Singlemode Source                              |         |         | х       |         |         |         |         |
| Visifault VFL  |         |         |         | х       | х       | х       |         |
| FI-500 FiberInspector Micro                              |         |         |         |         | Х       | х       |         |
| Inspection Probe Tips (LC,SC,1.25mm and 2.5mm Universal) |         |         |         |         | х       | х       |         |
| Findfiber Remote ID Source                               |         |         |         | х       | х       | X(2)    |         |
| SC Power Meter Adapter                                   | Х       | х       | х       | Х       | Х       | Х       | Х       |
| ST Power Meter Adapter                                   |         |         |         | х       | х       | х       |         |
| LC Power Meter Adapter                                   |         |         |         | Х       | Х       | Х       |         |
| Magnetic Strap Attachment                                | X(2)    | X(2)    | X(3)    | X(2)    | X(3)    | X(4)    | X(3)    |
| Carrying Case  | х       | х       | х       | х       | х       | х       | Х       |
| NFC-KIT-BOX Fiber Cleaning Kit                           |         |         |         |         |         | Х       |         |
| Microscanner 2   |         |         |         |         |         |         | Х       |



| General Specifications |  |  |
|------------------------|--|--|
| Temperature range      | Operating: -10 °C to 50 °C<br>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)<br>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)<br>MM/SM sources: 9.8 oz (278 g)  |  |

| Optical Sources                         |   |  |
|---|---|--|
| Optical output connector                | Fixed SC  |  |
| Emitter type                            | 850/1300: LED<br>1310/1550: FP Laser<br>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<br>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                 | ≤ 5 mΩ  |  |
| Insulation resistance             | ≥ 100 MΩ  |  |
| Ambient temperature               | -20 oC to 50 oC   |  |
| Inflammability class acc to UL 94 | V0  |  |
| Surge voltage category            | П   |  |
| 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)  |  |



| 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   |  |  |
| FTK1000                                  | Multimode Fiber Verification Kit: Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, VisiFault VFL, 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  |  |
| NFK1-SMPLX-SC/td>                                | 62.5 uM simplex reference cord set (SC/SC x 2); special patented damage-resistant end-faces    |  |
| NFK1-SMPLX-LC                                    | 62.5 uM simplex reference cord set (SC/LC, LC/LC); special patented damage-resistant end-faces |  |
| NFK1-SMPLX-ST                                    | 62.5 uM simplex reference cord set (SC/ST, ST/ST); special patented damage-resistant end-faces |  |
| NFK2-SMPLX-SC                                    | 50 uM simplex reference cord set (SC/SC x 2); special patented damage-resistant end-faces      |  |
| NFK2-SMPLX-LC                                    | 50 uM simplex reference cord set (SC/LC, LC/LC); special patented damage-resistant end-faces   |  |
| NFK2-SMPLX-ST                                    | 50 uM simplex reference cord set (SC/ST, ST/ST); special patented damage-resistant end-faces   |  |
| NFK3-SMPLX-SC                                    | SM simplex reference cord set (SC/SC x 2); special patented damage-resistant end-faces         |  |
| NFK3-SMPLX-LC                                    | SM simplex reference cord set (SC/LC, LC/LC); special patented damage-resistant end-faces      |  |
| NFK3-SMPLX-ST                                    | SM simplex reference cord set (SC/ST, ST/ST); special patented damage-resistant end-faces      |  |
| NFA-SC-SINGLE                                    | SC interchangeable adapter   |  |
| NFA-LC-SINGLE                                    | LC interchangeable adapter   |  |
| NFA-ST-SINGLE                                    | ST interchangeable adapter   |  |
| MS2-MAG-KIT                                      | Magnetic Strap Attachment and spare holster  |  |

Optical Power Meter and Fiber Test Kits



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

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