



## Copper and Fiber Technician's Kit

### CableIQ™ Qualification Tester and SimpliFiber® Pro

As an IT professional responsible for managing a hybrid copper and fiber network, you have a challenging job. You are an on-the-spot problem-solver and are always planning for future enhancements, working with both copper and fiber to seamlessly upgrade the network to higher speeds while continuously troubleshooting and optimizing the current infrastructure. To meet your growing project requirements and your shrinking personnel and budgetary resources, Fluke Networks' Copper and Fiber Technician's Kit provides a robust set of tools to help you expertly manage your network to keep it running smoothly – and inexpensively. The Copper and Fiber Technician's Kit pairs CableIQ and SimpliFiber Pro to provide all the testing and troubleshooting instruments you need to:



#### Copper

- Quickly qualify bandwidth (10/100, VoIP, or Gigabit Ethernet) of any cabling link
- Troubleshoot cabling performance faults such as crosstalk or impedance changes
- Graphically map wiring configuration and show distance to cabling faults
- Discover network devices and display device configuration (speed/duplex/pairing)
- Accurately locate cables and wires using IntelliTone™ digital signaling technology
- Save up to 250 test results

#### Fiber

- Quickly verify optical loss and power levels with single-port, simultaneous dual wavelength testing over six wavelengths (850, 1300, 1310, 1490, 1550, 1625)
- Conduct efficient cable routing identification with SimpliFiber Pro's FindFiber® capability
- Save up to 1,000 test results and upload and manage them on your personal computer via Fluke Networks' popular LinkWare Cable Test Management Software
- Track intermittent power fluctuations with the Min/Max feature

#### Ordering information

Model	Description
CIQ-FTKSFP	Copper and Fiber Technician's Kit – includes the CableIQ (CIQ-KIT) and SimpliFiber Pro (FTK1000)* Fiber Test Kit
SFSINGLEMODESOURCE	SimpliFiber Pro singlemode source
FT525 Video microscope	Inspect fiber end-faces for the #1 cause of link failures – microscopic contamination
FT120 Optical microscope	Inspect fiber end-faces for the #1 cause of link failures – microscopic contamination
VISIFAULT	VFL to verify and locate faults
NFC-KIT-BOX	Fiber end-face cleaning supplies

\*The FTK1000 is a multimode verification kit and includes a multimode source and power meter.

#### CableIQ™ Specifications

Cable types supported	UTP, STP, FTP, SSTP, RG6, RG59, audio, security
Qualification autotests	1000BASE-T, 100BASE-TX, 10BASE-T, VoIP, 1394b S100, TELCO, Wiremap only, Coax
Supported tests	Wiremap, length, cable signal performance, digital toner, analog toner, Ethernet port detection and identification, analog telephone detection, blink port light, continuity, speaker test, cable fault finding, video signal detection
Wiremap	Can detect single wire faults and supports MultiMap mode with up to seven remote office identifiers. Draws proportional wire length to breaks. Detects Split Pairs.
Find fault	Measures crosstalk and impedance and compares against appropriate limits based on qualification test selected. Detects location of large point sources as well as distributed sources in the cabling if they are sufficient to disqualify the application.
Results storage	Up to 250 qualification test results
Power	Battery type: 4 AA (NEDA 15A, IEC LR6) alkaline batteries
Battery life	20 hours of typical use, without backlight
Other battery types supported	4AA photo lithium, NIMH, NICAD
Dimensions and weight	7 in x 3.5 in x 1.75 in (17.8 cm x 8.9 cm x 4.5 cm) 1.2 lb (0.55 kg)



## CableIQ™ Specifications (continued)

M12/ RJ45 Cable Specifications	
Cable type	Ethernet cable, Cat5e, 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	2 m
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Ambient temperature	-20 °C to 50 °C
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)

## SimpliFiber® Pro 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

## SimpliFiber® Pro Specifications (continued)

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

### NETWORK SUPERVISION

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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](http://www.flukenetworks.com/contact).

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