

# SIGNALTEK™-FO Multimedia Qualification Tester



Fiber Optic and Copper Gigabit Qualification – Qualify copper and fiber-optic cabling to IEEE 802.3 standards

Multimedia Gigabit Qualification (Multimode and Single Mode capability) – Qualify short and long range cabling to a distance of up to 10km/

**BERT and Optical Attenuation Measurements –** Perform Bit Error
Rate Testing and decibel (dB) loss
measurements of optical links.

**Dual Wavelength Capability –** available in both 850nm and 1300mn wavelengths to support virtually all LAN and campus fiber applications.

Small Form factor Pluggable (SFP) modules are compact, light-weight and field changeable.

Storage and Reporting for Thousands of Reports – Store and print Qualification reports for copper and fiber jobs using internal memory or USB "thumb-drives".

# The World's First Fiber and Copper Qualifier

SIGNALTEK-FO is the first Qualification tester that offers both copper and fiber optic testing; and SIGNALTEK-FO does it for less than the price of an Optical Test Set alone.

## SIGNALTEK™-FO

# Capabilities beyond the typical Qualifier

SIGNALTEK-FO offers all of the existing capabilities of the standard SIGNALTEK Qualifier such as Gigabit Ethernet Qualification, test storage and reporting, and active link testing and adds the powerful capability of fiber optic Qualification.

Traditional power meter/light source kits only measure the attenuation of fiber optic links. As Gigabit Ethernet is becoming the standard for backbone and zone fiber optic cabling, attenuation tests alone may not be enough to guarantee error-free performance.

SIGNALTEK-FO's Bit Error Rate testing, adds assurance that fiber optic links can actually support high-speed data in accordance with IEEE 802.3ab standards.

Multimode and single mode capability

Available in 850nm and 1300nm wavelength configurations

Measure cable attenuation with a dynamic range of up to 20dB

Guarantee link operation at 1Gbps within IEEE error tolerances



# **Specifications**

In addition to cable performance qualification, SIGNALTEK™ can be configured to run for several minutes or hours at a time. While stress testing critical network links, SIGNALTEK™ transmits hundreds of Gigabits of information across the network while looking for dropped packets. This monitoring mode allows SIGNALTEK™ to be used to isolate intermittent network problems that are difficult to detect. Adopting the latest generation of Gigabit Ethernet technology, IDEAL's innovation brings the best performance to this new class of affordable testers.



# **Specifications (continued)**

#### Ports/Connections

- USB A/B, DC power input
- Shielded RJ-45 Port :Supports 10/100/1000Mbps Ethernet connections
- Small Form-factor Pluggable (SFP): Supports SFP modules sourced through IDEAL Industries in 850nm and 1300nm wavelengths, 1000Mbps Ethernet

#### SFP-850 - 850nm Module

- Class 1 Laser EN60825-1
- Compatible fiber types:  $50/125~\mu m$  or  $62.5/125~\mu m$  graded index multimode fiber
- Power Output (dBm): -9.5min, -3max
- Receiver Power Range (dBm): 0 to -20
- Max Link Length: 550m (1800ft) on 50/125  $\mu m$  fiber; 300m (985ft) on 62.5/125  $\mu m$  fiber
- Operating Temperature: -10 to 85°C (14 to 185°F), 85%RH non condensing

#### SFP-13X0 - 1300nm Module

- Class 1 Laser EN60825-1
- Compatible fiber types: 50/125  $\mu m$  or 62.5/125  $\mu m$  graded index multimode fiber and 9/125mm step index single mode fiber
- Power Output (dBm): -9min, -2.5max
- Receiver Power Range (dBm): 0 to -22
- Max Link Length: 550m (1800ft) on 50/125  $\mu$ m fiber; 300m (985ft) on 62.5/125  $\mu$ m fiber; 10km (6.2mi) on 9/125  $\mu$ m fiber
- Operating Temperature: -10 to 85°C (14 to 185°F), 85%RH non condensing

### Length Measurement

- RJ-45 Port: TDR length measurement of 1-4 pair cables to 140m/460ft
- SFP Port: No length measurement of fiber optic cables

#### Bert Error Rate Measurements

- Copper: 10/100/1000Mbps. Error rates tested to IEEE 802.3ab standard
- Fiber: 1000Mbps. Error rates tested to IEEE 802.3ab standard.

### Battery Life: Standard AA Alkaline Batteries

- Copper Testing: Approx 15 hours @ 22 tests per hour (45s Autotest)
- Fiber Testing: Recommend use of AC adapters when testing fiber



# SIGNALTEK™-FO Multimedia Qualification Tester Kit

### **SIGNALTEK-FO Included Accessories**

1 SIGNALTEK fiber ready near-end and 1 remote-end handset

#### Carrying case

Copper cable accessory kit with interfaces to RJ45, RJ11, Coax F-Type cables, and alligator clips

Fiber optic cable accessory kit: 2 duplex LC-SC 50/125  $\mu m$  (2m/7ft) cables, 2 duplex LC-SC 62.5/125  $\mu m$  (2m/7ft) cables, 1 duplex SC-SC adapter.

8 AA alkaline batteries

2 AC power adapters with international plugs

USB interface cable

1 CD-ROM User Manual

1 Training DVD

DESCRIPTION	CAT NUMBER (US/INT'L)
SIGNALTEK-FO W/ 2 850nm MODULES	33-981/33-984
SIGNALTEK-FO W/ 2 13X0nm MODULES	33-982/33-985
SIGNALTEK-FO W/ 2 850nm & 2 13X0nm MODULES	33-983/33-986
SIGNALTEK-FO (FIBER READY-NO MODULES)	33-987/33-988
PAIR OF 850nm SFP MODULES	SFP-850
PAIR OF 13X0nm SFP MODULES	SFP-13X0



### SIGNALTEK™ Standard Kit

Catalog No. 33-974

1 SIGNALTEK™ near-end and 1 remote-end handset

Carrying case

Copper cable accessory kit with interfaces to RJ-45, RJ11, Coax F-Type, and alligator clips.

8 AA alkaline batteries

USB cable

2 AC power adapters with international plugs

CD-ROM User Manual

Training DVD

DESCRIPTION	CAT NUMBER (US/INT'L)
SIGNALTEK™ Copper Performance Tester	33-974/33-975

## SIGNALTEK™Cable Qualification Tester Kit

# Save time and money troubleshooting fiber

The Visual Fault Finder is a light source used to locate breaks, poor mechanical splices and damaged connectors in fiber optic cables.

It's perfect to verify continuity, test and find breaks in fiber links, locate pinched fiber strands in termination cabinets, or anywhere fiber optic cables are terminated and subject to mechanical damage.



## **VFF5 Visual Fault Finder**

Laser light source used to locate breaks, faulty splices and crimps

- **NEW** 2.5mm Universal Adapter for all ST®, SC and FC connectors
- Useful over a distance of 5km (3miles)
- Two AA batteries provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged metal housing
- Nylon carrying case with belt loop included

DESCRIPTION	CAT NUMBER
Visual Fault Finder	VFF5

Note: ST® is a registered trademark of AT&T.

# **Fiber Inspection Microscope**



- 100X magnification for viewing multimode connectors
- Includes 2.5mm connector "Universal Adapter" for FC, ST® and SC style connectors
- Oblique illumination provides excellent view of ferrule cleanliness and core condition
- Rugged, rubberized metal housing, precision glass optics and a built-in laser safety filter
- White LED illumination delivers 100,000 hours bulb life
- Soft padded carrying case included
- Battery life 48+ hours
- Compact size 7.5 in. x 1.96 in. x 1.18 in.
- Optional 200X Conversion Eyepiece threads on for viewing finish/ polish of singlemode connectors

DESCRIPTION	CAT NUMBER
Fiber Inspection Microscope	45-332
1.25mm Connector Adapter	45-334
MTRJ-Style Connector Adapter	45-335
200X Conversion Eyepiece for Singlemode Connectors	45-336

Note: ST® is a registered trademark of AT&T.

#### **IDEAL INDUSTRIES, INC.**

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