

# FIBERTEK Advanced Fiber Test Option



The FIBERTEK fiber accessory for the LANTEK 6 and 7 is the perfect solution for certifying or troubleshooting fiber backbones and fiber to the desktop installations in single building and campus environments. FIBERTEK measures signal loss, length, and delay over Multimode and Singlemode fiber. In addition dual wavelength, bi-directional testing is enabled by having both a transmitter and receiver in each adapter.

FIBERTEK is available in two basic kits one each for Multimode and Singlemode. The Multimode kit contains two adapters, a 850 nm VCSEL light source and receiver to allow certification of fiber intended to host Gigabit Ethernet and a 1300 nm Fabry Perot laser source with receiver. The Singlemode kit also contains two adapters, a 1310 nm Fabry Perot laser with receiver and a 1550 nm Fabry Perot laser source with receiver.

Using only one of the FIBERTEK adapters, in the display unit, length and delay can be measured in loop-back mode.

Using both the display and remote units enables signal loss, dual wavelength, and bi-directional measurements.

Two methods are available for computing loss budget. The installer can input the type of fiber under test and the number of connectors and splices and have the loss budget automatically calculated. Or the user can input the loss value for each connector and splice to explicitly determine the loss budget.

FIBERTEK adapters fit entirely into the display and remote units and lock into place. There are no bulky adapters extending from the end of the units, creating a product that is easy to handle and producing accurate and repeatable results.

- Measures signal loss, length, and delay over Multimode and Singlemode fiber
- 850 nm VCSEL light source enables Gigabit Ethernet certification on Multimode fiber
- Enables bi-directional, dual wavelength measurements for both Multimode and Singlemode fiber
- Network specific autotests available for the most popular network types
- Talkset capability for both Multimode and Singlemode fiber available for enhanced communications

### TRACETEK™

FIBERTEK also comes in a premium version that includes TRACETEK. TRACETEK is a powerful option that analyzes reflections along a fiber and reports distance to events as well as the magnitude. This can eliminate the need for a more expensive OTDR in some environments.

## FIBERTEK Advanced Fiber Test Option

In order to improve productivity, talkset capability is also available for FIBERTEK. By simply plugging in the talkset to the display and remote units, installers can communicate over fiber in the same fashion as over copper.

FIBERTEK supports network specific certification tests including 1000Base-LX and 1000Base-SX for Gigabit Ethernet. This allows the installer to easily certify fiber for the most common network types. All fiber tests are stored in the same way as copper tests and can be uploaded to a PC running LANTEK Reporter to create reports.

Specifications	FIBERTEK
Detector Receive Wavelengths:	MM: 850 and 1300 nm SM: 1310 and 1550 nm
Measurement Accuracy:	±0.03 - 0.05 dB @ -20dBm
Dynamic Range:	MM: -53 dBm SM: -53 dBm
Fiber Type	9.0/50/62.5/125 micron
Detector Type:	INGaAs
Transmitters Power Output:	850 (MM): -3 dBm into MM Fiber 1300 (MM): -10 dBm into MM Fiber 1310 (SM): -10 dBm into SM Fiber 1550 (SM): -10 dBm into SM Fiber
Source Type:	850 (MM): VCSEL Laser 1300 (MM): Fabry Perot Laser 1310 (SM): Fabry Perot Laser 1550 (SM): Fabry Perot Laser
Filtering Type	Kalman
Signal Loss Dynamic Range (MM) Dynamic Range (SM)	0 to -35 dB at Specified Accuracy 0 to -40 dB at Specified Accuracy
Propagation Delay Accuracy Resolution Range	±4% or ±2.0 ns (the greater of) ±1.2 - 1.5 ns 0 - 300 ms
Cable Length Accuracy Resolution Distance Range	±4% or ±0.3 m (the greater of) ±0.5 m 850 (MM) to 2 km 1300 (MM) to 5 km 1310 (SM) to 10 km 1550 (SM) to 10 km
Network Specifications	1000BASESX/LX (Gigabit Ethernet) ATM-155, ATM-622 Legacy Networks 100BASE-F 10BASE-FL, 10BASE-FL/FB,

Configuration Information	
FIBERTEKMMB (0012-00-0336)	Hardcase, 850 & 1300 Adapters with ST connectors, ST Launch Cables & ST Sleeves & Manual
FIBERTEKMMP (0012-00-0338)	All content above and TRACETEK (Adapter, Long Launch Cable & Splitter), IDEAL's advanced fault and event locator.
FIBERTEKSMB (0012-00-0037)	Hardcase, 1310 & 1550 Adapters with FC connectors, FC Launch Cables, FC Sleeves & Manual
FIBERTEKSMP (0012-00-0339)	All content above and TRACETEK (Adapter, Long Launch Cable & Splitter), IDEAL's advanced fault and event locator.

- TRACETEK is a powerful option that analyzes reflective events along the fiber under test.
- Locates events, such as bad splices, along the fiber under test
- Reports distance to events and the magnitude of the event
- Stores traces for uploading to a PC running LANTEK Reporter for reports

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