# **Owner's Manual**

## Multi-Function Optical Fiber Cable Tester

#### Model: T020-001-PSF

#### **PROTECT YOUR INVESTMENT!**

Register your product for quicker service and ultimate peace of mind. You could also win an ISOBAR6ULTRA surge protector—a \$100 value!

www.tripplite.com/warranty



1111 W. 35th Street, Chicago, IL 60609 USA • www.tripplite.com/support

Copyright © 2015 Tripp Lite. All rights reserved.

## **Package Includes**

- T020-001-PSF Tester Unit
- Owner's Manual

#### **Product Features**

- All-in-One Optical Fiber cable tester with Power Meter, Light Source, and Visual Fault Locator
- Easy-to-use LCD interface
- · Determine optical power loss
- Visual fault locator finds visual faults in the cable, featuring multiple frequency settings for continuous and flashing modes
- · Light Source supports 1310 nm and 1550 nm wavelengths
- Power Meter supports 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm wavelengths
- · Features an auto-off function to save battery power
- Includes a USB Micro-B port for use in charging rechargeable batteries
- Features FC connectors with optional SC, ST, and LC adapters available

#### **Cable Tester Unit**

- Power Button When off, press this button to turn the unit on. When on, press this button to toggle the Auto-Off feature on/off, or hold it down to turn off the unit.
- 2 Power Meter / Light Source Button (ℜ) – Press this button to toggle the LCD screen between the Power Meter and Light Source screens.
- Reference Button (REF) When testing for power loss between an external light source and the power meter, hold this button down to save the current power loss value. When saved, this value will appear in the upperright corner of the LCD screen. Once power loss data is saved, pressing this button will toggle between absolute power measurement and relative power loss measurement.



Power Measurement Button (<sup>dbm</sup>) – Press this button to toggle between the available units of measurement that can be displayed on the LCD screen.

#### Cable Tester Unit (continued)

- S Wavelength / VFL Button (<sup>A</sup><sub>R</sub>) Press this button to change the wavelength setting in the power meter and light source screens. Hold it down to activate the Visual Fault Locator.
- Frequency / OSL Button (MORT) Press this button to change the frequency when measuring the optical light source power loss or using the visual fault locator. Hold it down to initiate an optical light source power loss measurement.
- USB Micro-B Port If the batteries you are using with the tester are rechargeable, you can recharge them by connecting this USB Micro-B port to the USB port on a computer or USB wall charger.
- **S** FC Connector (OP) Attach a cable to this connector when using the Power Meter function.
- FC Connector (SL) Attach a cable to this connector when using the Light Source function.
- FC Connector (RL) Attach a cable to this connector when performing a Visual Fault Locator test.
- Dust Cover Protects FC connectors from, dust, dirt and other contaminants.

## **LCD Screen**



- 2 *Power loss measurement data,* with the unit of measurement shown to its right.
- 2 Selected wavelength.
- 3 A saved power loss reference value or the selected frequency value.
- 4 Battery icon showing the remaining battery capacity.
- 5 Power cord icon will display if you are using rechargeable batteries and charging them via the USB Micro-B connector on the side of the unit.
- 6 *Auto-off* icon will display if the Auto-off function is currently on. When this function is off, the icon will not be displayed.

#### **Power Meter Screen**

When turning on the unit, the power meter screen is the first to be displayed. When in a screen other than the power meter screen, press the *Power Meter / Light Source*  $\binom{OF}{ST}$  button on the unit to access it. The power meter screen consists of the power data in the center of the screen, with the selected unit of measurement displayed to the right of it. The selected wavelength is in the upper-left corner of the screen. If power data is saved as a reference value, it will be displayed in the upper-right corner of the screen. When in the power meter screen, the following commands are available:

- Press the Wavelength / VFL (AL) button to toggle between the available wavelengths. The power meter wavelength should match that of the light source.
- Press the Power Measurement (<sup>dbm</sup>/<sub>dbm</sub>) button to cycle through the available units of measurement to display power loss information in.
- To perform a power measurement test between the power meter and built-in light source, press and hold the *Frequency / OSL* (<sup>MIL</sup>) button.
  - o When performing a measurement test, press the Frequency / OSL  $\binom{1000}{OSL}$  button to toggle between the available frequencies to test at.
  - o When performing a power measurement test between an external light source and the power meter, hold down the *Reference* (REF) button to save the *Absolute Power Measurement* data. When saved, this value will appear in the upper-right corner of the LCD screen, and the screen will switch to display the *Relative Power Loss*. Once saved, pressing the *Reference* (REF) button will toggle between the *Absolute Power Measurement* and the *Relative Power Loss Measurement*.

## **Light Source Screen**

To access the light source screen, press the Power Meter / Light Source  $\binom{OP}{SL}$  button on the unit, toggling from the power meter screen to the light source screen. The light source screen consists of the wavelength in the center of the screen and the frequency in the upper-right corner.

- Press the Wavelength / VFL button  $(\frac{\lambda}{nL})$  to toggle between the available wavelengths. The built in light source supports wavelengths of 1310 nm and 1550 nm.
- Press the *Frequency / OSL* (NOTE) button to toggle between the available frequencies. The built in light source supports frequencies of 0 Hz, 270 Hz, 1000 Hz, and 2000 Hz.

#### **Visual Fault Locator**

#### CAUTION!

When performing a visual fault locator test, never point the laser directly at your eyes.

To initiate a visual fault locator test, press and hold down the Wavelength / VFL  $(\frac{\lambda}{RL})$  button. The red laser will then be activated and sent through the connected cable. If there are no breaks in the cable, the red laser will shine through the connector on the opposite end of the cable. If there is a break, the red laser will stop at the location of the break, where you will be able to see it shining through the cable jacket. While performing a visual fault locator test, you can press the *Frequency* / OSL  $(\frac{OBL}{OSL})$  button to toggle between the available frequencies (O Hz, 1 Hz, 2 Hz) for continuous or flashing modes.

## **Warranty and Product Registration**

#### **1-YEAR LIMITED WARRANTY**

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

EXCEPT AS PROVIDED HEREIN, TRIPP LITE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL TRIPP LITE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, TRIPP LITE is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

#### PRODUCT REGISTRATION

Visit www.tripplite.com/warranty today to register your new Tripp Lite product. You'll be automatically entered into a drawing for a chance to win a FREE Tripp Lite product!\*

\* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

#### WEEE Compliance Information for Tripp Lite Customers and Recyclers (European Union)



Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite they are entitled to:

- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- · Send the new equipment back for recycling when this ultimately becomes waste

Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. Do not use this equipment in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice.



1111 W. 35th Street, Chicago, IL 60609 USA • www.tripplite.com/support

15-11-089 • 93-34DC\_revA