TRENDnet TC-NTP1

TRENDnet TC-NTP1 Inline PoE Tester User Manual

Model: TC-NTP1

1. INTRODUCTION

The TRENDnet TC-NTP1 Inline PoE Tester is a compact tool designed for network professionals. It provides accurate testing for various Power over Ethernet (PoE) technologies, including 4PPoE, PoE+, PoE, and passive PoE. This device operates inline between a PoE source (PSE) and a PoE device (PD), offering real-time data on wattage, voltage, and amperage. It is compatible with IEEE 802.3af/at/bt PoE devices up to 100W and non-standard passive PoE devices ranging from 11V to 60V.

2. KEY FEATURES

- **PoE Technology Support:** Tests 4PPoE, PoE+, PoE, and passive PoE.
- **Real-time Monitoring:** Displays wattage, voltage, and amperage of the connected PoE device.
- **Multiple Testing Modes:** Includes T-mode for PSE device testing, N-mode for non-standard passive PoE, and I-mode for inline PoE testing.
- **User-Friendly Operation:** Battery-free design for immediate use.
- **Compatibility:** Supports IEEE 802.3af/at/bt PoE devices up to 100W and passive PoE from 11V – 60V.
- **Step Button Functionality:** Allows cycling through and locking display readouts for voltage, amperage, and wattage.
- **Gigabit Ports:** Equipped with one Gigabit port for PSE connection and one Gigabit port for PoE device connection.
- **NDAA Compliant:** Suitable for government networking solutions (U.S. and Canada Only).

3. PACKAGE CONTENTS

- TRENDnet TC-NTP1 Inline PoE Tester
- Quick Installation Guide

4. PRODUCT OVERVIEW

Figure 4.1: Angled view of the TRENDnet TC-NTP1 Inline PoE Tester, showing the display and ports.
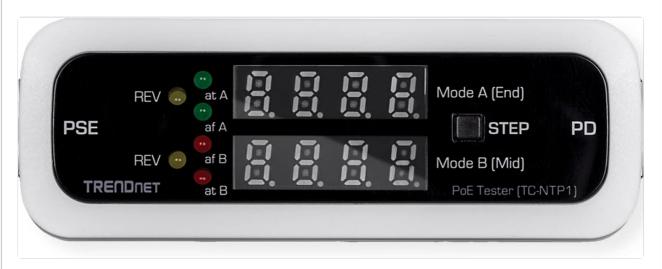

Figure 4.2: Top view of the TC-NTP1, highlighting the LED display for Mode A (End-span) and Mode B (Mid-span) and the 'STEP' button.

Figure 4.3: Front view of the TC-NTP1, showing the PSE (Power Sourcing Equipment) Gigabit Ethernet port.

Figure 4.4: Bottom view of the TC-NTP1, showing the product information label.

5. Setup

1. Ensure the TC-NTP1 is free from any physical damage.

2. The device is battery-free and ready for use upon connection. No external power source is required for its operation.

3. Identify the Power Sourcing Equipment (PSE) and the Powered Device (PD) in your network setup.

6. Operating Instructions

6.1. Connecting the Tester

1. Connect the Ethernet cable from your PoE source (e.g., PoE switch or injector) to the **PSE** port on the TC-NTP1.

2. Connect an Ethernet cable from the **PD** port on the TC-NTP1 to your PoE device (e.g., IP camera, access point).

3. The TC-NTP1 will automatically power on and begin displaying information.

6.2. Testing Modes

The TC-NTP1 offers three distinct testing functions:

- **T-mode (PSE Device Testing):** This mode is used to determine the PoE type and voltage output of your Power Sourcing Equipment (PSE), such as a PoE switch or injector. Connect the PSE directly to the tester's PSE port.

- **N-mode (Non-Standard Passive PoE Devices):** Designed for testing non-standard passive PoE devices. This mode supports devices with voltage ranges from 11V to 60V.

- **I-mode (PoE Inline Testing):** For real-time monitoring, connect the tester inline between the PSE and the Powered Device (PD). This mode displays the voltage, amperage, and wattage being delivered to the connected PD.

6.3. Using the Step Button

The **STEP** button on the TC-NTP1 allows you to cycle through the displayed readouts (voltage, amperage, and wattage). Pressing the button repeatedly will switch between these values. You can also press and hold the button to lock the display on a specific readout for continuous monitoring.

7. SPECIFICATIONS

Feature	Detail
Model Number	TC-NTP1
Brand	TRENDnet
PoE Standards	IEEE 802.3af, 802.3at, 802.3bt
Supported PoE Types	4PPoE, PoE+, PoE, Passive PoE
Max Power Output	Up to 100W
Passive PoE Voltage Range	11V – 60V
Ports	1 x Gigabit PSE, 1 x Gigabit PD
Display	LED (Wattage, Voltage, Amperage, Polarity)
Power Source	Battery-Free (Powered by PoE)
Dimensions (L x W x H)	3.9 x 1.4 x 1 inches (99 x 36 x 25 mm)
Weight	2.82 ounces (0.08 kg)
Operating Temperature	32°F to 122°F (0°C to 50°C)
Certifications	CE, FCC

8. TROUBLESHOOTING

- **No Display/Power:** Ensure the PoE source is active and providing power. The TC-NTP1 is battery-free and draws power from the PoE connection. Verify the Ethernet cables are properly connected and functional.

- **Incorrect Readings:** Double-check that the cables are securely connected to the correct PSE and PD ports. Ensure the PoE source and device are compatible with the tester's supported standards.

- **Device Not Powering On (PD):** If the PoE device connected to the PD port is not powering on, use T-mode to test the PSE directly to confirm it is supplying power correctly. Then, use I-mode to check the inline power delivery.

- **Polarity Issues:** The tester indicates polarity. If a "REV" (Reverse Polarity) LED illuminates, there may be an issue with the PoE source or cabling.

9. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use liquid or aerosol cleaners.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the device with care to prevent physical damage to the ports or internal components.

10. WARRANTY AND SUPPORT

The TRENDnet TC-NTP1 Inline PoE Tester is backed by a **2-year TRENDnet Manufacturer Protection** from

the date of purchase. For technical assistance or warranty claims, please contact TRENDnet's customer support.

TRENDnet provides reliable technical support with English-speaking advisors and experts available during normal business hours. For support, visit the official TRENDnet website or refer to the contact information provided in the Quick Installation Guide.

For more information, visit the TRENDnet Store on Amazon.

Related Documents - TC-NTP1

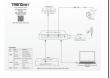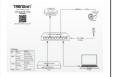|	
	[TRENDnet TI-IG219 Industrial PoE++ 2.5G Gigabit Injector - Specifications and Features](#) Detailed information on the TRENDnet TI-IG219 industrial PoE++ 2.5G Gigabit injector, including its features, specifications, rugged design, power capabilities, and network solution applications.
	[TRENDnet TI-SG704 Industrial 10G PoE++ Splitter Specifications](#) Explore the features and specifications of the TRENDnet TI-SG704 Industrial 10G PoE++ Splitter, designed for reliable network power and data distribution in demanding environments.
	[TRENDnet TPE-101I/TPE-102S PoE Injector and Splitter User's Guide](#) Comprehensive user's guide for TRENDnet's TPE-101I Power over Ethernet injector and TPE-102S Power over Ethernet splitter. Includes installation instructions, product details, troubleshooting tips, and technical support information.
	[TRENDnet 5/8-Port Gigabit PoE+ Switch Quick Installation Guide](#) Quick installation guide for TRENDnet 5-Port Gigabit PoE+ Switch (TPE-TG50g) and 8-Port Gigabit PoE+ Switch (TPE-TG80g / TPE-TG82g), including setup diagram, LED indicators, and compliance information.
	[TRENDnet TPE-TG82g 8-Port Gigabit PoE+ Switch Quick Installation Guide](#) Quick installation guide for the TRENDnet TPE-TG82g 8-Port Gigabit PoE+ Switch, covering setup, LED indicators, compliance, and safety information.
	[TRENDnet TEW-311BRP Wireless Router User's Manual](#) User's manual for the TRENDnet TEW-311BRP Wireless Router, providing detailed instructions on installation, configuration, features, and troubleshooting for home and SOHO networks.