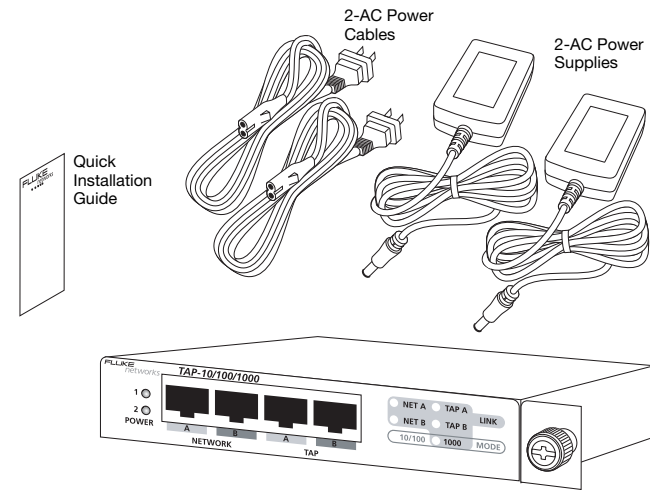


## Unpacking



### UNIVERSAL PACKING LIST

- (1) TAP-10-100-1000 Single Port Ethernet Tap
- (1) Quick Installation Guide
- (2) AC Power Cords (for power redundancy)
- (2) Switching AC Adapters

## Introduction

The Single Port In-Line Ethernet Tap provides a simple method to monitor a 10/100BASE-T network passively or 1000BASE-T traffic (with power redundancy) while using network analysis tools. With this non-intrusive tap, you can quickly and effectively deploy your tools to the point of failure. Install the tap on a critical Ethernet link in the network where monitoring and analysis capabilities are needed.

### FEATURES AND BENEFITS

- 10/100BASE-T and 1000BASE-T (Gigabit)-ready
- Full-duplex monitoring
- Non-intrusive passive monitoring
- Non-directional in-line tap ports
- Fault-tolerant power capacity
- Rack mountable small form factor
- Standard RJ45 connectors

### RACK INSTALLATION OPTIONS

Contact your Fluke Networks representative to learn more about using the included thumbscrew mounting bracket for mounting in either a 1U, 3-bay (TAP-RMK-3) or 4U, 14-bay (TAP-RMK-14) Rack Mounting Kit.

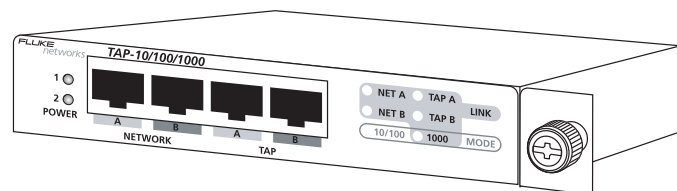


Figure 1. TAP-10-100-1000 unit shown with included thumbscrew bracket for standalone mounting

## Specifications

FEATURE	SPECIFICATION
CHANNEL	one (1): 10/100BASE-T or 1000BASE-T
CABLE TYPE	CAT 5E
PORT CONNECTIVITY ALL PORTS	RJ45
DISTANCE LIMIT	100m max. length between network end-points. (1m typical length for network tools, up to 100m)
POWER REQUIREMENTS	Dual external power supplies: 5V DC, 2A
OPERATING TEMPERATURE	0° to 40°C (32° to 104°F)
STORAGE TEMPERATURE	-30° to 65°C (-22° to 149°F)
HUMIDITY	RH 5% to 95% non-condensing
DIMENSIONS	(H) 28mm x (W) 146mm x (D) 146mm (H) 1.10" x (W) 5.75" (D) 5.75" (includes rack mount bracket)
WEIGHT	unit: 340.2g (12oz) shipping: 907.2g (2lbs)



Figure 2. Three TAP-10-100-1000 units mounted in the optional 1U, 3-bay (TAP-RMK-3) Rack Mounting Kit

## General Installation Notes

### FUNCTIONAL OPERATION

Refer to **Figure 3** for the Single Port In-Line Ethernet Tap basic functional diagram. **Figures 4** and **5** below provide detailed functional diagrams for both passive 10/100BASE-T and power redundant 1000BASE-T modes.

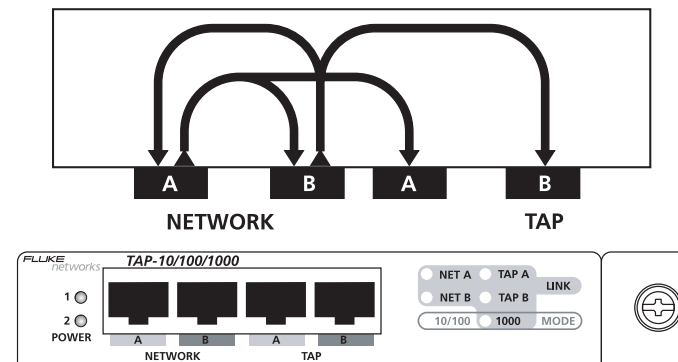


Figure 3. TAP-10-100-1000 basic functional diagram

### FUNCTIONAL OPERATION continued

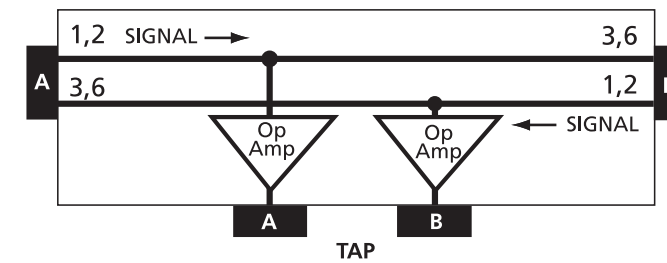


Figure 4. Basic functional diagram for 10/100BASE-T mode

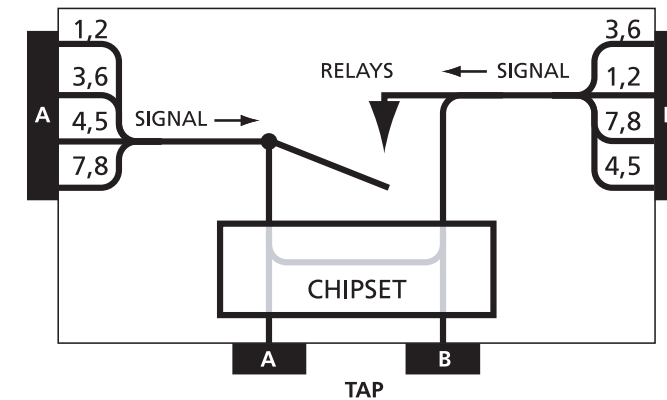


Figure 5. Basic functional diagram for 1000BASE-T mode

### NETWORK INSTALLATION

To install the Single Port In-Line Ethernet Tap on a network, refer to **Figure 7** on the following page.

#### IMPORTANT

Before inserting the Ethernet Tap into a network, you must first select the operating speed used in the networking environment. Use the sliding switch located on the rear panel, shown below in **Figure 6**, to select between either 10/100BASE-T (passive mode) or 1000BASE-T (power redundant) network linking.

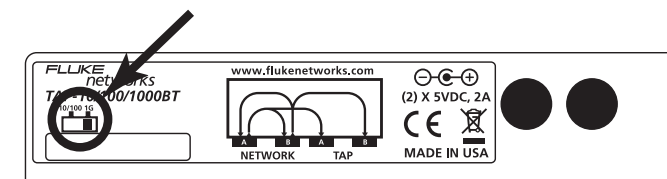


Figure 6. Network link speed sliding switch for 10/100BASE-T or 1000BASE-T, located on rear panel of the TAP-10-100-1000 Ethernet Tap.

**205 Westwood Ave**  
**Long Branch, NJ 07740**  
**1-877-742-TEST (8378)**  
**Fax: (732) 222-7088**  
**salesteam@Tequipment.NET**

6-panel Z-fold layout:  
 CUT AT 4.25in from  
 right edge of this side

6-panel Z-fold layout:  
CUT AT 4.25in from  
^^ left edge of this side ^^

## General Installation Notes continued

### IMPORTANT

For 1000BASE-T network linking, both endpoint devices must have an established link before the TAP-10-100-1000 Ethernet Tap can be powered. Doing so ensures that the endpoint devices can renegotiate linking in the event of Ethernet Tap power failure.

1. Locate a point in your network where the Single Port In-Line Ethernet Tap will be inserted for testing or monitoring.
2. Use a CAT 5E cable to connect the first network device into the Ethernet Tap's **NETWORK A** port.
3. Use a separate CAT 5E cable to connect the second network device into the Ethernet Tap's **NETWORK B** port.
4. Connect one of the network analysis tool ports to the Ethernet Tap's **TAP A** port using a CAT 5E cable.
5. Connect the other network analysis tool ports to the Tap's **B TAP** connector using a separate network CAT 5E cable.

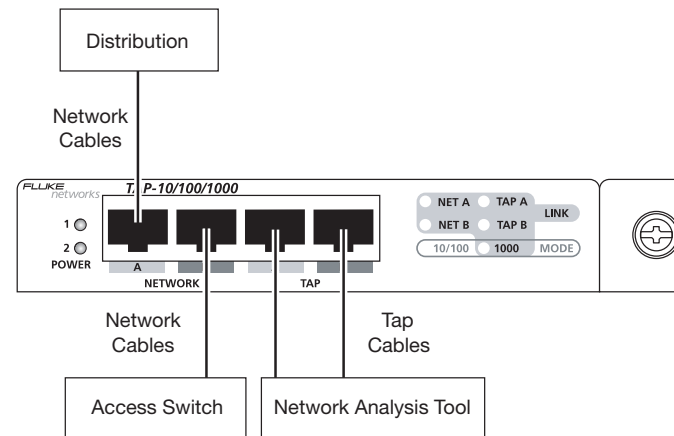


Figure 7. Single Port In-line Ethernet Tap simple connectivity diagram

6. Use both provided power supplies to assure uninterrupted monitoring. Connect both power supply barrel connectors into the dual power ports on the Ethernet Tap's rear panel. Plug each power supply into separate power sources on different power circuits to eliminate power as a single point of failure. **POWER 1** and **2** LEDs will illuminate, indicating that the power sources are working properly. A **POWER** LED failing to illuminate indicates a defective power source; replace the non-functional source immediately to ensure redundant power integrity.

### NOTE

In 10/100BASE-T passive mode, only one non-multiplexed signal is present on the Tx/Rx pair. In 1000BASE-T power redundant mode, all four cable pairs are simultaneously used in both Tx/Rx via echo cancellation and PAM-5 technique.

## COMPLIANCE TESTING

### IMPORTANT

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## CE CERTIFICATIONS

This equipment has been tested and found to meet the radiated and conducted emission limits for a **Class B** product of **EN 55022** to the **EMC Directive 89/336/EEC** requirements.

This equipment has been tested and found to meet the immunity levels for **Class 1**, tested to **level 2** for **EN 6100-4-2**, tested to **level 3** for **EN 61000-4-3**, tested to **level 2** for **EN 61000-4-4**, and tested to **level 3** for **EN 61000-4-5** to the **EN 50082-1** requirements and meets the **Class A** requirements for **EN 61000-3-2** and **EN 61000-3-3**.

This equipment has completed the Product Safety Review and found to meet the **Low Voltage Directive 72/23/EEC (1993)** requirements.

## CONTACTING FLUKE NETWORKS

Visit the Fluke Networks website at [www.flukenetworks.com](http://www.flukenetworks.com).

Send email to: [support@flukenetworks.com](mailto:support@flukenetworks.com).

For operating assistance, sales, or service in the USA, call 1-800-283-5853.

From other countries:

- Canada: 1-800-363-5853
- Europe: +44 1923 281 300
- Beijing: +86 (10) 6512-3435
- Japan: +81-3-3434-0181
- Singapore: +65-6738-5655
- Anywhere in the world: +1-425-446-4519

Visit our website for a complete list of phone numbers.



## Single Port In-Line Ethernet Tap

TAP-10-100-1000

## QUICK INSTALLATION GUIDE

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September 2007

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