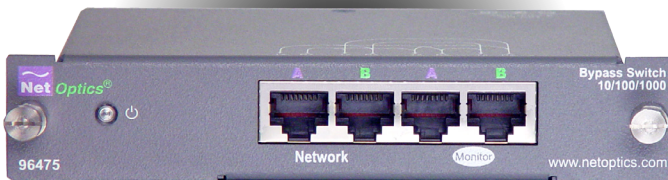




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## Installation Guide for 10/100/1000 Bypass Switch

Model 96475 & 96476



Doc. IGMNET96475/76 Revised 07/05

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No licenses, express or implied, are granted with respect to any of the technology described in this manual. Net Optics retains all intellectual property rights associated with the technology described in this manual. This manual is intended to assist with installing Net Optics products into your network.

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## Introduction

Net Optics GigaBit Bypass Switches provide a permanent and trouble-free access port for in-line network security and monitoring devices. The GigaBit Bypass Switch automatically switches network traffic through added in-line devices or bypasses devices that are about to be removed. Prevent link failure when attached IPS and IDS devices lose power by powering the Bypass Switch and in-line device from the same power source.

## Uninterrupted Traffic

The GigaBit Bypass Switch supports fail-open monitoring with any 10/100/1000 GigaBit in-line device when it shares the same power source as the in-line appliance. While the GigaBit Bypass Switch is receiving power, it diverts network traffic to attached in-line devices. In this state, all in-line traffic is routed directly to the device connected to the GigaBit Bypass Switch.

When the GigaBit Bypass Switch loses power, in-line traffic continues to flow through the network link, but is no longer routed through the device. This allows the network devices to be removed and replaced without network downtime. Once power is restored to the GigaBit Bypass Switch, network traffic is seamlessly diverted to the in-line device, allowing it to resume its critical functions.

## Simply Plug It In

Each Bypass Switch includes all the cables and power supplies you need to quickly connect to an IPS. Three quick steps is all it takes to establish a secure connection point for inline devices.

## Key Features

### Passive, Secure Technology

- Fail-open monitoring with any 10/100/1000 GigaBit in-line appliance at speeds up to 1000 Mbps.
- Increased reliability on critical network links.
- High-speed optical switching with minimal insertion loss.

### Ease of Use

- LED indicators show power, speed, link, and activity status
- Front-mounted connectors support easy installation and operation
- Cables included for plug-and-play deployment

## Key Features (continued)

### Ease of Use

- Silk-screened application diagram illustrates all connections for easy deployment
- Optional 19-inch rack frames holds two Taps
- Tested and compatible with all major manufacturers' monitoring devices, including protocol analyzers, probes, and intrusion detection/prevention systems

### Support

- Net Optics offers free technical support throughout the lifetime of your purchase. Our technical support team is available from 8 am to 5 pm Pacific Time, Monday through Friday at +1 (408) 737-7777 and via email at [ts-support@netoptics.com](mailto:ts-support@netoptics.com). FAQs are also available on Net Optics website at [www.netoptics.com](http://www.netoptics.com).

## Product Diagram

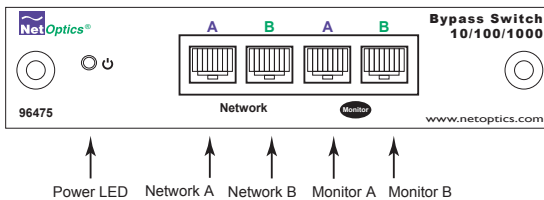


Figure 1.

## Connecting the 10/100/1000 Bypass Switch to the Network

1. Unpack the Bypass Switch, and obtain the required cables needed to successfully install the unit.
2. Connect Network Port A to the appropriate switch, server or router device. This will act as your DCE Interface.
3. Connect Network Port B to the appropriate switch, server or router device. This will act as your DTE interface.
4. Verify that the Bypass Switch Network Ports are cabled in-line between two devices.

## Connecting the 10/100/1000 Bypass Switch to the Intrusion Prevention Device

1. Connect Monitoring Port A to the IPS sensor port A using a CAT5 RJ45 cable. This will act as your DCE Interface.
2. Connect Monitoring Port B to the IPS sensor port B using a CAT5 RJ45 cable. This will act as your DTE interface.
3. Verify that the Switch Monitoring Ports are cabled in-line between two devices.

### Cabling Guidelines

#### 10/100 Devices:

- If connecting to Switches or Hubs, use CAT5 RJ-45 Cross-over cabling.
- If connecting to Routers or NIC cards, use CAT5 RJ-45 Straight-thru cabling.

#### GigaBit Devices:

- CAT5 RJ-45 Straight-thru cabling.

## Connecting the 10/100/1000 Bypass Switch

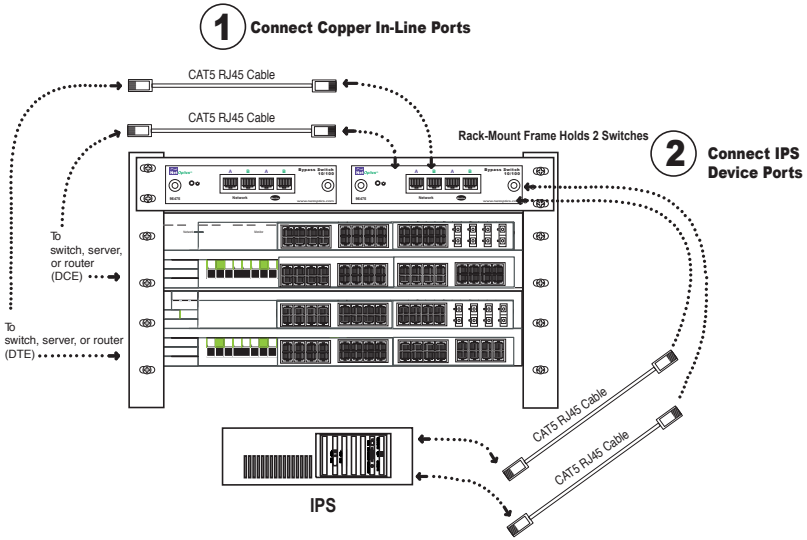


Figure 2.

## Specifications

### Operating Specifications:

Operating Temperature: 0°C to 55°C

Storage Temperature: -10°C to 70°C

Relative Humidity: 10% min, 95% max, non condensing

### Mechanical Specifications:

Power Supply: Input Power: 100-240V, 0.5A, 47-63Hz

Output Power: 5V, 2.4A

Dimensions: 1.125" high x 4.2" deep x 4.5" wide

### Cable Interface:

Copper Cable Type: 22-24 AWG unshielded twisted pair cable,  
CAT5/CAT5E

### Connectors:

#### 96475 model:

(2) RJ45, 8 pin connectors (monitoring ports)

(2) RJ45, 8 pin connectors (network ports)

#### 96476 model:

(2) RJ45, 8 pin connectors (monitoring ports)

(2) RJ45, 8 pin connectors (network ports)

(1) RJ45, 8 pin connectors (control port)



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Net Optics, Inc. warrants this 10/100/1000 Bypass Switch to be in good working order for a period of ONE YEAR from the date of purchase from Net Optics or an authorized Net Optics reseller.

Should the unit fail anytime during the said ONE YEAR period, Net Optics will, at its discretion, repair or replace the product. This warranty is limited to defects in workmanship and materials and does not cover damage from accident, disaster, misuse, abuse or unauthorized modifications.

If you have a problem and require service, please call the number listed at the end of this section and speak with our technical service personnel. They may provide you with an RMA number, which must accompany any returned product. Return the product in its original shipping container (or equivalent) insured and with proof of purchase.

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