LPH1006A Quick Start Guide

Table 2-1. Switch components.		
Number in Figures 2-1	Component	Description
1	(2) Power LEDs	Lights when unit is powered on.
2	DIP Switch Select	
3	(2) SFP Link/Act LEDs	
4	(2) SFP slots	SFP module (LFP411–LFP414, LFP416) installs here
5	(4) Gigabit RJ-45 PoE ports	Link to 10/100/1000-Mbps PoE Ethernet devices or segments
6	(1) Power Fault LED	
7	(4) RJ-45 port LINK/ACT LEDs	ON when port is connected; OFF when port is not connected; Flashing when data is transmitted or received
8	(4) RJ-45 port PoE LEDs	ON when port is using PoE; OFF when port is not using PoE

NOTE: SFP modules are ordered separately.

Table 2-2. DIP switch functions.

DIP-1	DIP-2	Description
OFF	OFF	Power failute relay alarm disabled.
ON	OFF	PWR-1 failure, relay alarm enabled
OFF	ON	PWR-2 failure, relay alarm enabled.
ON	ON	PWR-1 or PWR-2 failure, relay alarm enabled.

Table 2-3. Compatible SFPs.

Code	Description
LFP411	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 850-nm Multimode, LC, 300 m
LFP412	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Multimode, LC, 2 km
LFP413	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 10 km
LFP414	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 30 km
LFP416	SFP with SGMII Interface, 1.25 Gbps, Copper, 10/100/1000BASE-T, Extended Diagnostics

Customer Support Information

Order toll-free in the U.S.:
Call 877-877-BBOX
(outside U.S. call 1-724-746-5500)

FREE technical support
24 hours a day, 7 days a week:
Call 724-746-5500 or
fax 724-746-0746

Mailing address:
Black Box Corporation
1000 Park Drive
Lawrence, PA 15055-1018

Web site: www.blackbox.com

E-mail: info@blackbox.com

lph1006a_qsg_rev1

LPH1000 Series Industrial Ethernet PoE Switch

Quick Start Guide

1. Specifications

Features	
Processing	Store-and-Forward
MAC Addresses	1 K
Mechanical	
User Controls	(1) DIP switch for SFP speed setting; (1) DIP switch for Relay output
Indicators	Per RJ-45 port: (1) LINK/ACT, (1) PoE; Per SFP port: (1) LINK/ACT; Per unit: (2) PWR, (1) Fault LED
Connectors	(4) RJ-45, 10/100/1000BASE-T(X) PSE, auto MDI/MDI-X; (2) SFP slots
Dimensions	5.6"H x 1.6"W x 3.7"D (14.3 x 4.1 x 9.4 cm)
Weight	1.2 lb. (0.54 kg)
Power	
Redundant	Dual 24–36 VDC inputs on 6-pin terminal block
Consumption	7.5 W, with overload current protection
Relay	1 A at 24 VDC
Environmental	
Temperature Tolerance	Operating: -40 to +158° F (-40 to +70° C); Storage: -40 to +185° F (-40 to +85° C)
Humidity	10 to 95%, noncondensing
Approvals	
Regulations	EMI, EMS, Shock, Free Fall, Vibration, Safety

Approvals	
Certifications	FCC Class B, CE
Standards	IEEE 802.3x Flow control; IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX/FX; IEEE 802.3ab 1000BASE-T; IEEE 802.3z 1000BASE-X; IEEE 802.3at POE (up to 30 W per port for PSE)

2. Overview

2.1 Features

This unmanaged PoE switch provides (4)10/100/1000 Mbps ports plus (2) SFP open slot. It was designed for easy installation and high performance in an environment where traffic is on the network and the number of users increases continuously.

2.2 Features

- Provides (4) 10/100/1000Mbps PoE (PSE) ports plus (1) SFP slot.
- Supports PSE based on IEEE 802.3t standard up to 30 W per port.
- Includes dual 24 VDC power inputs.
- SFP supports 100BASE-TX and 1000BASE-X speeds.
- Auto-negotiates speed and polarity.
- Supports store-and-forward transmission.
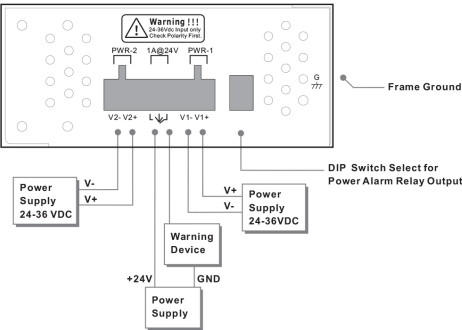- Mounts on a DIN rail or wall.

2.3 What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.
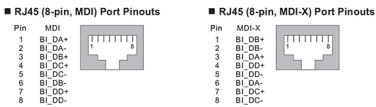
- (1) Gigabit Ethernet Switch
- This Quick Installation Guide

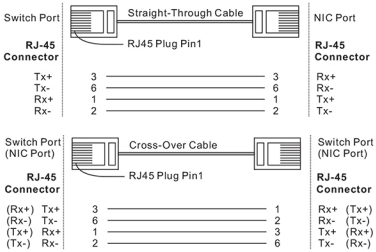---

2.4 Hardware Description

Power Connection Guide

1000BASE-T Ethernet Connection

10/100BASE-T(X) Ethernet Connection

Front and Top Panels

Figures 2-1 and 2-2 show the front and back panels of the switch. Table 2-1 describes its components.

Figure 2-2. Front and top panels.