## LGH1006A Quick Start Guide

Specifications

| Approvals |  |
| :---: | :---: |
| Ethernet Standards | IEEE 802.3 for 10BASE-T <br> IEEE 802.3 u for 100BASE-TX and 100BASE-FX <br> IEEE 802.3ab for 1000BASE-T <br> IEEE $802.3 z$ for 1000BASE-X <br> IEEE 802.3x for Flow control |
| EMI | FCC Part 15, CISPR (EN55022) class A |
| EMS | EN61000-4-2 (ESD), EN61000-4-3 (RS), <br> EN61000-4-4 (EFT), EN61000-4-5 (Surge), <br> EN61000-4-6 (CS), EN61000-4-8, <br> EN61000-4-11 |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Safety | EN60950-1 |
| Environmental |  |
| Operating Temperature | -40 to $+158^{\circ} \mathrm{F}\left(-40\right.$ to $\left.+70^{\circ} \mathrm{C}\right)$ |
| Storage Temperature | -40 to $+185^{\circ} \mathrm{F}\left(-40\right.$ to $\left.+85^{\circ} \mathrm{C}\right)$ |
| Operating Humidity | 5 to 95\%, noncondensing |
| Performance |  |
| MAC Table | 1K MAC addresses |
| Processing | Store-and-Forward |
| Physical |  |
| Connectors | (4) 10/100/1000BASE-T(X) RJ-45, auto-MDI/MDI-X ports, <br> (2) 100/1000BASE-X SFP ports |
| Enclosure | IP-30 |
| Dimensions | $\begin{aligned} & 5.68 " \mathrm{H} \times 1.03 \mathrm{~W} \mathrm{~W} \times 3.74 \text { "D } \\ & (14.43 \times 2.61 \times 9.49 \mathrm{~cm}) \end{aligned}$ |
| Weight | $0.9 \mathrm{lb} .(0.41 \mathrm{~kg}$ ) |
| Indicators | (2) Power LEDs:, <br> (1) Fault LED, <br> (4) 10/100/1000BASE-T(X) RJ-45 Port LEDs, <br> (2) 100/1000BASE-X SFP port LEDs |
| User Controls |  |
| SFP Speed DIP switches 1 and 2 (for ports 5 and 6) | DIP Switch ON: SFP speed is set to 100 Mbps, DIP Switch OFF: SFP speed is set to 1000 Mbps |
| Relay Output DIP switches 1 and 2 (for Power 1 and Power 2 ports) | DIP Switch 1: Power 1 failed warning, DIP Switch 2: Power 2 failed warning |



Great tech support is just 60 seconds away at 724-746-5500 or blackbox.com.

Specifications (continued)

| Power | (2) 12-48 VDC inputs on 6-pin terminal block |
| :--- | :--- |
| Input | 6.4 W (powered device not included) |
| Consumption | Present |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Fault Contact Relay Output |
| 1 A at 24 VDC |  |

# 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:
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gh1006a_qsg_rev1

BLACK BOX
LGH1006A

## LGH1006A Industrial Ethernet Switch

## Quick Start Guide

Has (4) 10/100/1000BASE-T(X) ports and
(2) $100 / 1000 B A S E-X$ SFP ports.


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) LGH1000 Series Industrial Ethernet Switch -
(4) 10/100/1000-Mbps, (2) GE SFP
- (1) 6-pin terminal block
- (4) RJ-45 dust covers
- (2) SFP slot dust covers
- (3) M3 round screws
- (2) wall mount brackets and hardware
- (1) DIN rail
- This Quick Start Guide


## LGH1006A Quick Start Guide

## Overview

The LGH1006A Industrial Ethernet Switch is an unmanaged Ethernet switch, with four 10/100/ 1000BASE-T(X) ports and two 100/1000BASE-X SFP ports. To set the optical network speed SFP port, change the settings of the DIP switch as described in Table 3-1. The operating temperature ranges from -40 to $+158^{\circ} \mathrm{F}\left(-40\right.$ to $\left.+70^{\circ} \mathrm{C}\right)$.

## Features

- Provides four 10/100/1000BASE-T(X) ports.
- SFP port supports 100BASE-FX and 1000BASE-X dual speed.
- Switch supports auto-negotiation and auto-MDI/ MDI-X.
- Uses store-and-forward transmission and flow control.
- Has IP-30 housing.
- Mounts on a DIN rail or on a wall.

Hardware Description


Figure 1. Front panel.

## LGH1006A Quick Start Guide

Table 1. Front panel components.

| Component | Description |
| :--- | :--- |
| (2) LEDs: PWR1, PWR2 | Lights when corresponding power port is <br> adtive |
| (1) Power Fault LED | Lights when the power fails |
| (2) SFP Link/Act LEDs | Lights when there is actibiy on the <br> corresponding port |
| (2) 100/1000BASE-T(X) SFP <br> port | Lights when the port is operating at 1000 <br> Mbps |
| (4) Gigabit LAN ports | Lights when the port is operating at 1000 <br> Mbps |
| (4) Port Link/Act. LEDs | Lights green when there is activity on the port |
| (4) 100-Mbps LEDs | Lights amber when the corresponding port is <br> operating at 100 Mbps |

Table 2. SFP speed selection DIP switches (for Ports 5 and 6.

| for Ports 5 and 6. |  |
| :--- | :--- |
| SFP Speed Selection DIP <br> Switch Positions 1 and 2 | Description |
| Both OFF | 1000 Mbps |
| Both ON | 100 Mbps |

Power Connection Guide


Figure 2. Power connections.

## LGH1006A Quick Start Guide

Table 3. Power DIP switches for PWR-1 and PWR-2.

| Power DIP Switch <br> Settings |  | Description |  |
| :--- | :--- | :--- | :---: |
| PWR 1 | PWR 2 |  |  |
| OFF | OFF | Power failure 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 <br> enabled |  |

## Installation

Install the DIN rail or wallmount brackets on the switch as shown below.


Figure 3. DIN Rail or Wallmount brackets installation.

