

# Gigabit Intelligent FTTO Switches



# Key Features

- Gigabit FTTO Switch for the installation into cable-trunks and sub-floor boxes
- Smallest dimensions in 45x45 mm design
- 48 VDC with PoE 802.3af
- Easy tool-free installation
- Fits into all common installation systems (cable-trunks)
- Integrated Management-Agent, SNMP/Telnet/web based
- Manual/automatic configuration of all ports
- Implementation of the full VLAN functionality
- Data prioritization (Qos) for VoIP applications

#### Future Proof Concept

The BLACK BOX Fiber To The Office concept with its intelligent combination of fiber and twisted-pair cabling offers a long term and therefore future proof investment into the building infrastructure.

#### Gigabit Performance

For the first time it is now possible to supply Gigabit speed to the end user using the Fiber To The Office (FTTO) concept. The full Gigabit speed is supported on the copper interfaces on the end user side and also on the fiber uplink.

The use of a 100 Mbit transceiver module on the fiber side enables a downwards compatibility to 100 Mbit networks.

The upgrade to Gigabit speed is done by simply changing the optical module (SFP).

The Gigabit FTTO Switches for installation in cable-trunks or subfloor tanks allow the connection of up to two Gigabit Ethernet end devices (10/100/1000Base-T) per Gigabit optical fiber connection (1000Base-SX). Power-over-Ethernet integrated Further terminal units can be connected via two Fast Ethernet ports (10/100Base-TX).

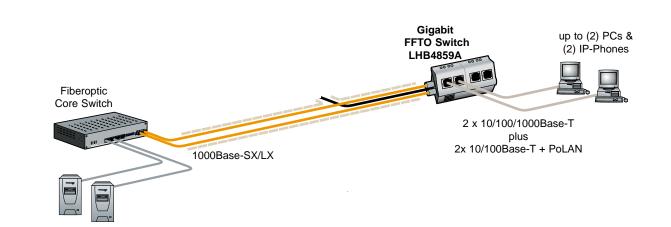
An integrated Power-over-Ethernet-Controller assures the standard compliance IEEE® Std. 802.3af®) of devices like IP telephones, IP cameras or WLAN access points.

#### Easy Installation

Due to the tool less snap-in installation the mounting of the switch is done easily and fast. This most compact system on the market ensures furthermore the compatibility to the most common installation systems of the world.

Comprehensive Management The integrated management agent allows the complete configuration, monitoring and administration of all devices in the network with a powerful software packet, the BLACK BOX Device Manager. Additional features such as VLAN, Data Prioritization (QoS) and Powerover-Ethernet can be assigned individually.

The firmware update enables to use additional features (e.g. Authentication, SNMP, Telnet, etc), without changing the hardware.



Optical Output Power -

Max. Transmission -

Indicators - LEDS: Power;

FO-Ports: Link/Activity

TP-Ports: Link/Activity, PoE

Management - Status Information via

Web-based Management http-Server;

Optional: Monitoring/Configuration

via SNMPv1; Configuration via Telnet;

Sensitivity -

LHB4851A: -10 dBm (850 nm MM)

LHB4851A: -20 dBm (850 nm MM)

LHB4851A full duplex Distance: 550m

## **Specifications**

#### All versions:

Standards — According to IEEE 802.3u for installation in cable channels and sub floor boxes Ports 1+2 ----(2) RJ45 10/100/1000Base-T Ports 3+4 -(2) RJ45 10/100BaseTX with PoE; Port 5 -LHB4851A: (1) 1000BaseSX/SC-MM LHB4852A: (1) 1000BaseLX/SC-SM LHB4859A (1) SFP slot Cable Type — STP Cable, 100W,

Category 5 with RJ45 Plug Max. Cable Length — 100 m (TP) Optical Fiber Type — Multimode optical fiber 50 or 62.5/125 µm, duplex, SFP Optional: 9/125 µm Single mode Optical Fiber Data Transmission Rate — TP

(Port1+2): 10/100 Mbps autoneg.); (Port3+4): 10/100/1000 Mbps; 1 x SFP (pluggable) FX: 1000 Mbps, (configurable full duplex operation) Wavelength -

LHB4851A only: 850 nm Multimode

# Ordering information

### ITEM

CODE

Intelligent Gigabit FFTO-Switch

(2) 10/100/1000T + (2) 10/100TX with PoE + (1) 1000BaseSX MM . . .LHB4851A (2) 10/100/1000T + (2) 10/100TX with PoE + (1) 1000BaseLX SM ... LHB4852A (2) 10/100/1000T + (2) 10/100TX with PoE + (1) SFP slot ......LHB4859A

#### Accessories

Power Supply 48W/1.35A 65 WLH	B4800-PS
Installation box for wall mounting, white with 3 blind plates	.LHB4501
Mounting kit for cable raceways & DIN installation boxes, S99 frame	.LHB4511
Mounting kit for Ackermann GB2 (sub-floor box)	.LHB4521
Mounting kit for Ackermann GB3 (sub-floor box)	
-	

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Configuration via PC-based

Operating Operating Temperature -

5% to 80%, non condensing

Storage Temperature — -20°C to 85°C

Management Tool

Power - 48 VDC

0°C to 50°C

Relative Humidity -

Size — 45x45 design,

vertical mounting

or

http://www.blackbox.com/world\_ offices/worldoffices\_index.html

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