



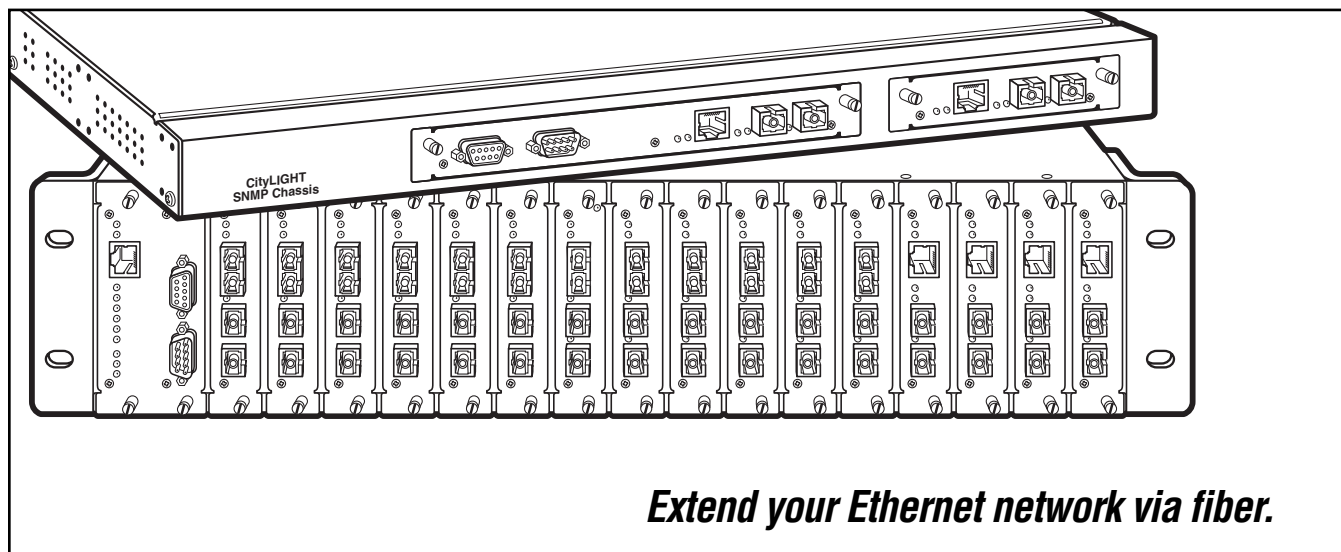
# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

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Black Box Corporation.

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## CityLIGHT 16-Slot Chassis with SNMP Slot



*Extend your Ethernet network via fiber.*

### Key Features

- ▶ **One SNMP Module can manage both ends of the link.**
- ▶ **The 10-/100-Mbps transceiver or switch supports switch-selectable auto-negotiation.**
- ▶ **Each copper port has a maximum drive distance of 100 m over UTP cables.**
- ▶ **The Gigabit Ethernet Transceiver supports single-mode fiber link distances up to 40 km.**
- ▶ **Link Loss Forwarding.**

The CityLIGHT chassis and cards give you versatile fiber extension for your LAN.

Choose from 10-/100-Mbps Ethernet transceivers, Gigabit Ethernet transceivers, or 10-/100-Mbps Ethernet switches with SC, ST, SC with WDM, or SC with WDM connectors. You can install up to 15 transceivers or switches and one SNMP module in the 16-slot chassis.

#### What is WDM?

WDM (Wavelength Division Multiplexing) is a technology that combines many different data streams over a single strand of fiberoptic cable. Each data stream (or channel) has a separate light wavelength. A WDM multiplexor combines the wavelengths into a single lightstream for transmission over fiber.

#### 10-/100-Mbps Ethernet Transceivers and Switches

The Ethernet Transceiver or Switch provides 10BASE-T or 100BASE-TX LAN extension for links up to 50 km. An optical 100BASE-FX multimode interface is available on the user side.

The 10-/100-Mbps Transceiver supports all Ethernet frame sizes, including ISL 91548 byte frames and encapsulated non-Ethernet frames such as FDDI 4-KB frames.

The Ethernet transceiver transparently supports half- and full-duplex ports. Distance is only limited by power budget in a full-duplex environment.

The 10-/100-Mbps Ethernet Switch provides filtering, learning and spanning tree operation as on 802.1d bridges.

You can manage the transceiver or the switch using the standard CityLIGHT SNMP module.

#### Gigabit Ethernet Transceivers

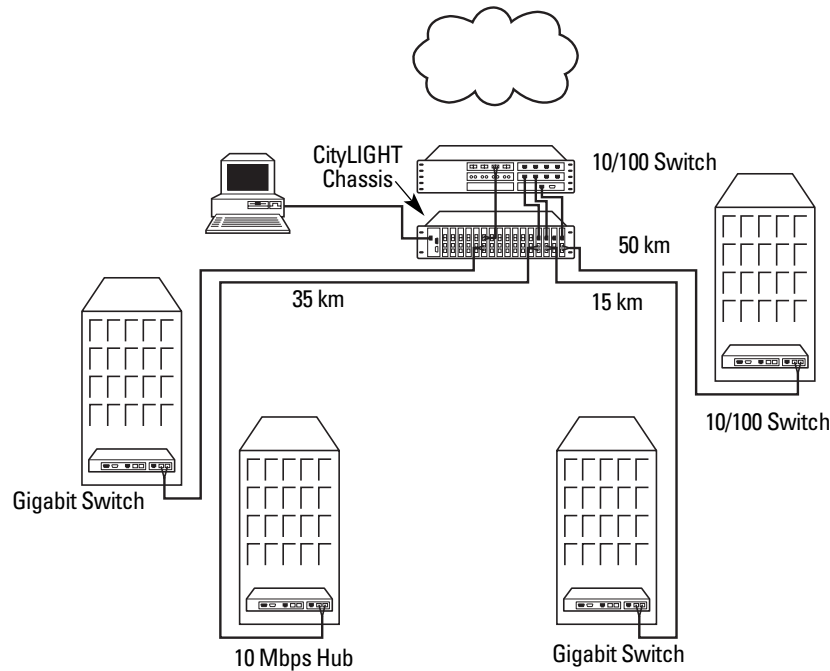
The Gigabit Ethernet Transceiver is available in two versions supporting 1000BASE-SX (850-nm multimode) and 1000BASE-LX (1300-nm single-mode) customer interfaces to single-mode links up to 40 km. The transceiver supports all Ethernet and Gigabit frame lengths up to 8192 bytes. You can also manage it using the standard CityLIGHT SNMP module.

Other transceiver and switch features include:

- Link Loss Forwarding allows fiber link failures to be extended to the copper side (on the 10-/100-Mbps models) or customer interface (on the Gigabit models).
- The hot-swappable CityLIGHT modular system is easy to upgrade.



**CityLIGHT  
provides fiber  
connectivity for  
Gigabit or  
10-/100-Mbps  
Ethernet switches  
and transceivers.**



## Specifications

**Distance:** Ethernet: Standard power: Up to 35 km; High power: Up to 50 km; Gigabit Ethernet: Standard power: Up to 15 km; High power: Up to 40 km

**Standards:** SNMP V.1: UDP/IP PPP/SLIP serial interface ASN.1 CityLIGHT specific MIB Telnet™; Ethernet: IEEE 802.3, IEEE 802.3u

**Connectors:** SNMP module: (1) DB9 female, (1) DB9 male, (1) RJ-45; Ethernet: (1) pair of SC or ST®, (1) RJ-45

**Indicators:** SNMP module: LEDs: Power, SNMP Agent, Test; Extender modules: Power, RX Alarm, Data Rate, Link, Remote Fault, LAN-specific diagnostics

**Power:** 16-slot chassis: 110 to 220 VAC, 50 to 60 Hz, or 48 VDC

**Size:** 16-slot chassis: 5.25"H (3U) x 17.3"W x 5.2"D (13.3 x 43.9 x 13.3 cm)

## What the Package Includes

### Chassis

- CityLIGHT Chassis
- Power supply
- Users' manual

### Transceivers and Switches

- 10-/100-Mbps Ethernet or Gigabit Transceivers or 10-/100-Mbps Ethernet Switches
- Users' manual

### SNMP Module

- CityLIGHT SNMP Module
- Users' manual

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a

vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.



# Ordering Information

ITEM	CODE
CityLIGHT Chassis, 16-Slot (3U) with SNMP Slot.....	LCL210A
CityLIGHT Power Supplies for the 16-Slot Chassis	
110 to 220 VAC .....	PS210
48 VDC .....	PS211
CityLIGHT SNMP Module .....	LCL113A
10-/100-Mbps Ethernet Transceivers	
Single-Mode Fiber Optic	
SC, 35 km.....	LCL533A
SC, 50 km.....	LCL534A
ST, 35 km.....	LCL535A
ST, 50 km.....	LCL536A
10-/100-Mbps Ethernet Switches	
Single-Mode Fiber Optic	
SC with WDM* .....	LCL551A
SC, 35 km.....	LCL552A
SC, 50 km.....	LCL553A
ST with WDM* .....	LCL554A
ST, 35 km.....	LCL555A
ST, 50 km.....	LCL556A
Gigabit Ethernet Transceivers	
1000BASE-SX to Single-Mode Fiber Optic SC	
15 km .....	LCL831A
40 km .....	LCL833A
1000BASE-LX to Single-Mode Fiber Optic SC	
15 km .....	LCL832A
40 km .....	LCL834A
<i>Remember to order cables...</i>	
Category 5 Patch Cable, 100-MHz, 4-Pair, Straight-Pinned, PVC, Beige, 10-ft. (3.0-m) .....	EVMSL05-0010
Duplex Fiber Optic Cable, PVC, Custom Lengths	
ST-ST .....	EFN062-CC
SC-SC.....	EFN4025

\*WDM modules must be used in matched pairs.



Black Box offers the best warranty program in the industry—Fido Protection®. For more information, request **FaxBack 22512**.

