

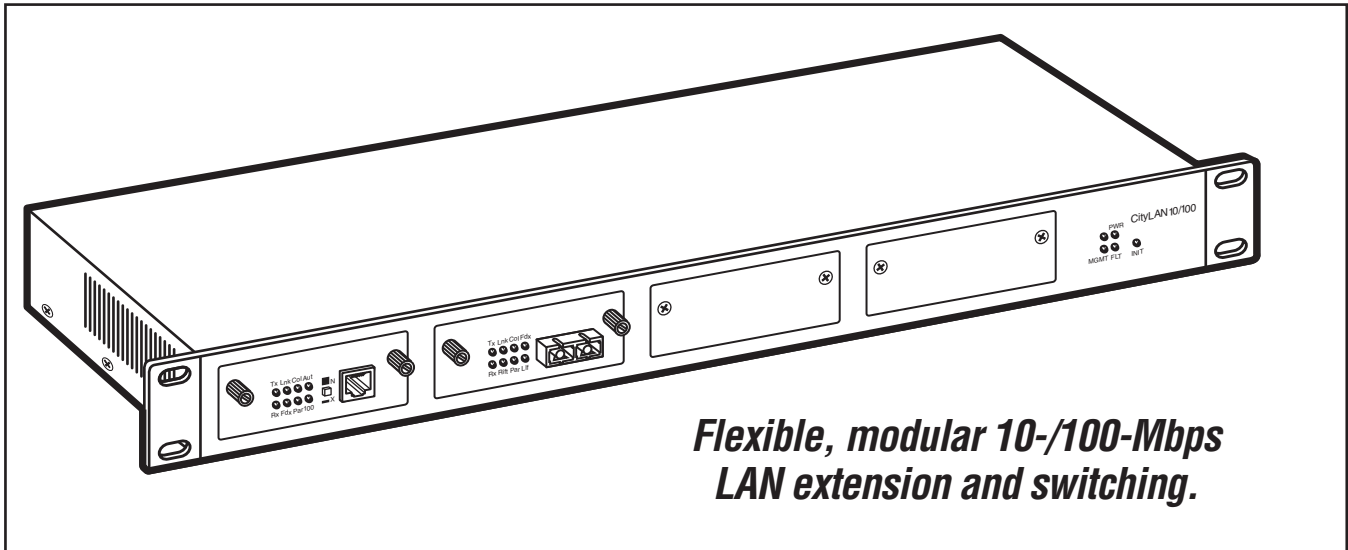


© 2000. All rights reserved.
Black Box Corporation.

BLACK BOX[®]

NETWORK SERVICES

CityLAN 10/100 Series Fast Ethernet LAN Extension Switch



Flexible, modular 10-/100-Mbps LAN extension and switching.

Key Features

- ▶ **Extend your Ethernet or Fast Ethernet LAN up to 50 km over single-mode fibre cable.**
- ▶ **Nonblocking full wire-speed operation.**
- ▶ **Half- and full-duplex support on all ports.**
- ▶ **Hot-swappable modules allow flexibility.**
- ▶ **Optional management module adds full SNMP management.**

CityLAN 10/100 Series Fast Ethernet LAN Extension Switches consist of a two- or four-port chassis (LCL165A-2P or -4P) and a selection of modules for port interfaces and management. Use these devices to bring remote half-duplex users into a central site over long distances via fibre, to extend high-speed backbones to remote users over fiber, to provide users with more bandwidth by segmenting network logical workgroups with 20-Mbps MAC bridging and Spanning Tree, or simply to upgrade users from 10 to 100 Mbps.

Both chassis have one- or two-switch ASIC device chips, 2 or 4 MB each of packet and address-table memory (1 MB of each per port), a PCI connector for an optional SNMP management module, two or four edge connectors for port-interface modules, a relay-contact connector, and a front-panel reset

button. The non-blocking switch allows full wire-speed data transmission of 148,800 frames/sec. on all ports.

The **plug-in port-interface modules** are hot-swappable for either copper (LCL166C-TP) or fibre (LCL166C-SMSC and -SMSCP) connections. It takes only about 20 seconds when a module is "hot inserted" for the management card to reset.

The 10/100BASE-TX Module (LCL166C-TP), with RJ-45 connectors, detects and corrects reversed polarity and auto-negotiates 10 or 100 Mbps.

Both 100BASE-FX Modules (LCL166C-SMSC and -SMSCP) connect to single-mode SC fibre. Model LCL166C-SMSC can extend LANs up to 20 km and has an optical budget of 10 dB. Model LCL166C-SMSC extends LANs up to 50 km and has an optical budget of 26 dB.

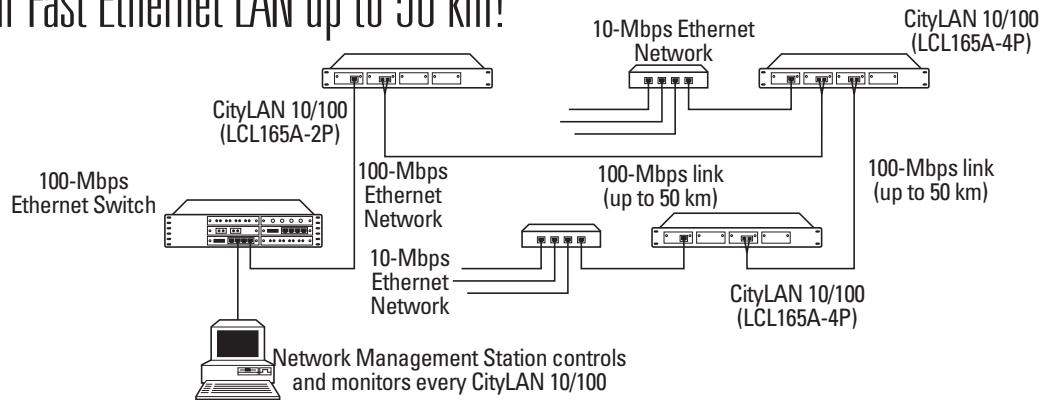
The optional **10/100 SNMP Management Module**, which is also hot-swappable and field-installable, can be activated by the reset button. This module includes a RISC i960P 33-MHz CPU with integrated PCI interface and bridge; hardware and software watchdog for automatic recovery; 4 MB DRAM, 128KB/512KB BOOT EPROM, and two 1-MB flash banks; and serial EIA-232 terminal port (DB9 male DCE) and SLIP (modem) port (DB9 male DTE).

Other 10/100 SNMP Management Module features include automatic partitioning of chassis ports with frequent errors; remote fault for 100BASE-FX interfaces; support of MIB II, Bridge MIB, and Private MIB (contains RMON Group 1 counters); software download via TFTP; network configuration via BOOTP; and Java[®] based Internet

Continued on Page Two



Extend your Fast Ethernet LAN up to 50 km!



Three sites operating at 10 and 100 Mbps are interconnected using fiber over 50 km.

Continued from Page One

Web management using standard Web browsers.

The Switches support half- and full-duplex operation. They also provide VLAN support for

secured network segmentation and switch on an ASIC-based Store-and-Forward principle.

Unmanaged units with two fibre optic interfaces also include Link Loss Forwarding, which

should be disabled if not linking two CityLAN Fast Ethernet Extender Switches.

With the 10/100 SNMP Management Module, the Switches comply with IEEE 802.1d

Spanning Tree bridging specifications.

These extension switches can be installed in a standard 19" rack or used as standalone desktop units.

Specifications

Protocols — Switch-selectable: 10BASE-T, 100BASE-TX, 100BASE-FX

Standards — IEEE 802.3 and 802.1d supported

Distance — LCL166C-TP: 100 m; LCL166C-SMSC: 20 km; LCL166C-SMSCP: 50 km

Memory — 1 MB per port for packets and address table

Operation — All Interface Modules: Half- or full-duplex

Technology — ASIC-based parallel store and forward

Internal Bandwidth — 1 Gbps

Address Table — 8K to 32K MAC addresses

Bridging — Per IEEE 802.1d Spanning Tree (with Management installed)

Filtering and Forwarding — Up to 4 x 14,880 pps/switch

Management — With SNMP Module: SNMP, MIB II, MIB,

RMON MIB, Private MIB, Traps, Java based Web management (using standard browsers), Telnet, BootP, SLIP, RS-232

Connectors — LCL165C-SNMP: (2) DB9; LCL166C-TP: (1) RJ-45; LCL166C-SMSC, -SMSCP: (1) pair SC

Alarms — Per port: General alarm relay; Per unit: LEDs for Unit Power Fail, Link Loss (except AUI interface), Remote Fault (100BASE-FX and managed only)

Operating Temperature — 0 to 40°C

Humidity — Maximum 95% noncondensing

Power — 115 to 230 VAC, 50 to 60 Hz, autosensing

Size — 4.4H x 45W x 29D cm

Weight — 5 kg

Your Chassis Purchase Includes . . .

- Two- or Four-Port Chassis
- User's Manual
- Rackmount Kit
- (1) MIB Disk
- (1) Terminal Serial Lead

Ordering Information

ITEM	CODE
CityLAN 10/100 Series	
Fast Ethernet LAN Extension Switch	
2-Port Chassis	LCL165A-2P
4-Port Chassis	LCL165A-4P
Modules for CityLAN 10/100 Series:	
10/100 SNMP Management Module	LCL165C-SNMP
Port Interface Modules	
10/100BASE-TX	LCL166C-TP
100BASE-FX, Single-Mode	
SC	LCL166C-SMSC
SC, Extended Distance	LCL166C-SMSCP

