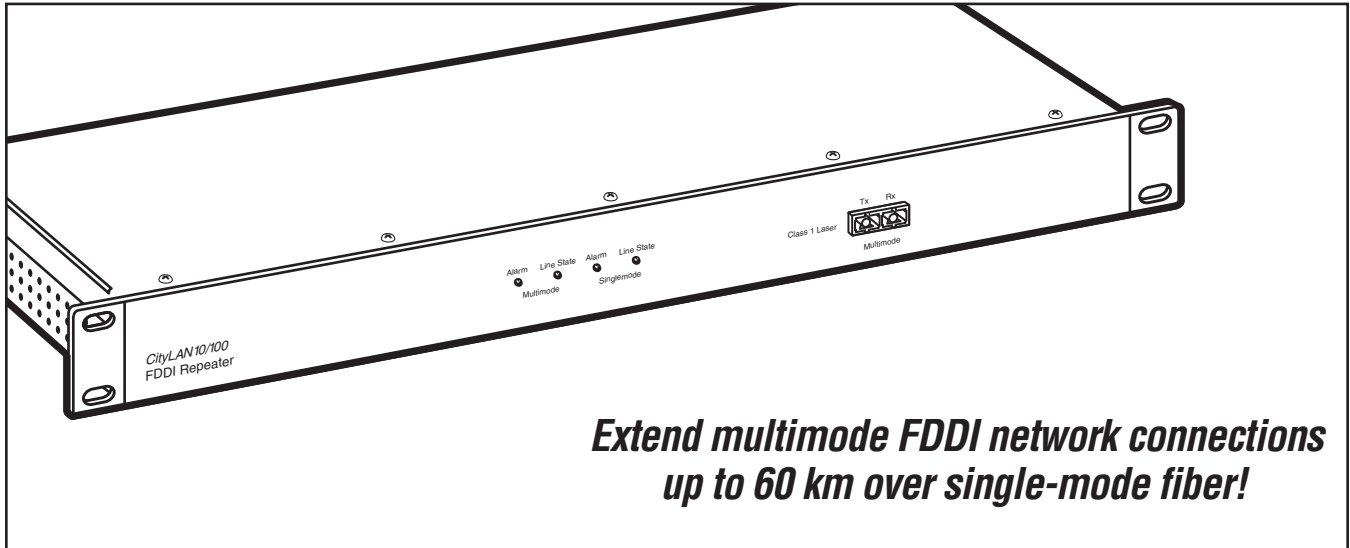




BLACK BOX[®]

NETWORK SERVICES

CityLAN 100 Series Long-Distance FDDI Repeater



Extend multimode FDDI network connections up to 60 km over single-mode fiber!

Key Features

- ▶ ***Extend FDDI 2 km over multimode and 60 km over single-mode fibre.***
- ▶ ***User-configurable dry-contact alarms provide quick warning of network problems.***
- ▶ ***Optional redundant power supply available for both repeater models.***
- ▶ ***Automatic recovery after network failures.***
- ▶ ***RS-232 port for out-of-band management.***

Your FDDI network is efficient enough, but you need to get across town to that new building you bought. How do you do it?

The CityLAN 100 Long-Distance FDDI Repeater can extend FDDI networks up to 2 km using multimode fibre optic cable. If you use high-power SC optics on the single-mode interface, you can extend your network an impressive 60 km.

The City LAN 100 is available in both single- and dual-link models. Functionally, both units are identical, and two single-link models work just like one dual-link model.

Both units have dry-contact alarms that report failure conditions, and you can configure the events that each alarm reports. For the most dependable alarm reporting over extended distances, four management operating modes are available:

- Direct Terminal Connection,
- Remote Terminal Connection (dial in),
- Remote Terminal Connection (dial out), and
- Remote Controller Device (uses simple async commands to gather information).

In all operating modes, the dry-contact alarms can still be configured to indicate error conditions.

The CityLAN 100 also has a built-in Management Serial Interface. Its features include:

- Serial-port communications at 9600 bps,
- VT100 Teletype control codes,
- Standard AT modem and dial strings, and
- Indicators of events and data on FDDI networks.

These units are powered externally with a nominal 100 to

240 VAC ($\pm 10\%$) power supply that is universal across input voltage ranges. A 48-VDC power supply and an optional redundant power supply are available for both single- and dual-port models

You can place as many of these repeaters on a network as you need. The only constraint is that you count each repeater as two stations in your total station count. (Each repeater port has a signal re-timing function, so each repeater counts as two stations.) As a general guideline, the default value for the number of physical stations on a ring is 1000. So, if you're using dual-attachment stations—devices that connect to both rings in an FDDI network—the default value is 500.

A slim 1U high, the CityLAN 100 also optimises your rack space and cuts down on extra cabling.

Specifications

Protocol — FDDI

Speed — 100 Mbps

Distance — Single-Mode: 60 km ;
Multimode: 2 km

Bit Error Rate — 2.5 x 10⁻¹⁰ (max.)

Indicators — LEDs for each port:
Rx, Power, Alarm, Line State

Contact Closures — 30 VDC, 1A
(max.); 120 VAC, 0.5A (max.)

Connectors — LCL163A: (1) pair SC;
LCL164A: (2) pairs SC [except
LCL164A-2MIC: (2) pairs MIC];
Both: (1) DB25 (RS-232)

Optical Output Power —

Multimode:

FDDI MIC (2 km):
-19 dBm min., -14 dBm max.;

Duplex SC (2 km):
-18.5 dBm min., -14 dBm

max.;

Single-Mode:

FC (Standard Power):
-12 dBm min., -7 dBm max.;

SC (High Power):
-4 dBm min., 0 dBm max.;

Optical Wavelength: 1300 nm

Optical Power Budget— Multimode:

(62.5/125-µm fibre) 12.5 dB;

Single-Mode: (9/125-µm fibre)

19 dB (FC Standard Power
Option);

30 dB (SC High Power Option)

Optical Input Power —

Multimode:

FDDI MIC (2 km):
-31 dBm min., -14 dBm max.;

Duplex SC (2 km):
-31 dBm min., -14 dBm max.;

Single-Mode:

FC (Standard Power):
-31 dBm min., -14 dBm max.;

SC (High Power):
-34 dBm min., -3 dBm max.

Temperature — Operating: 0 to
40°C; Storage: -10 to +70°C

Humidity — Up to 95%,
noncondensing

Power Consumption — < 15 watts

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

Size — 4.4H x 48.3W x 16.5D cm

Weight — 3.9 kg

Ordering Information

ITEM

CODE

CityLAN 100 Series Long Distance FDDI Repeater

Single-Link

115-/230-VAC.....LCL163A

With Redundant Power Supply.....LCL163A-R

48-VDC.....LCL163A-48

Dual-Link

115-/230-VAC.....LCL164A

With MIC Connectors.....LCL164A-2MIC

With Redundant Power Supply.....LCL164A-SMSC

48-VDC.....LCL164A-48