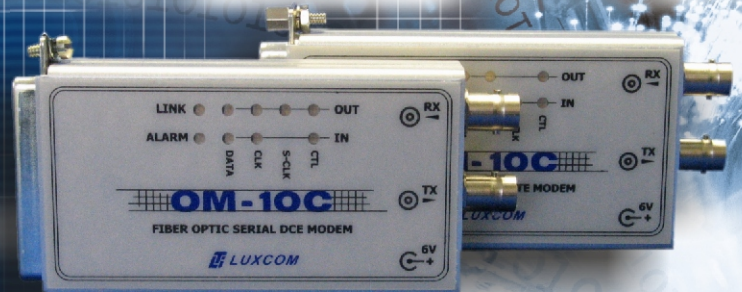


OM-10C

Fiber Optic Serial Data Modem

Applications

- Computer to computer
- Computer to printer
- Computer to encrypter
- Server to PC links



Description

The OM-10C modem transmits and receives serial asynchronous and synchronous data over a pair of optical fibers. The interface can be set to EIA530, EIA530A, RS232, or V.35. The modem is data rate transparent from DC to 384Kbps. Data, two clocks, and all hand-shake lines are passed across the link. There are two models of the OM-10C, a DCE and a DTE. The OM-10C-DCE connects to Data Terminal Equipment such as a computer. It has an on-board bit rate generator which outputs standard clock frequencies, if a clock is desired for synchronous communication. The OM-10C-DTE connects to Data Communication Equipment such as a modem.

Features:

- | | |
|-----------------------|---|
| EMI/RFI immune | Compatible with OM-10B |
| Programable interface | Wide temperature range (-40 C to 75 C) |
| Data plus two clocks | All handshake lines implemented |
| DC to 384Kbps | Inherent singlemode/multimode operation |
| DCE and DTE version | 5 Year warranty |

Specifications

Optical

Light source	850 nm LED M version	1300 nm SLED MM version
Optical connectors	ST	
Optical Sensitivity M version	-49 dBm (>10 ⁻⁹ BER)	
Optical Sensitivity MM version	-51 dBm (>10 ⁻⁹ BER)	
M version -18dBm launch, 62.5/125 fiber, 3 dB loss/km	9.3 Km	
M version -35dBm launch, 9/125 fiber, 2 dB loss/Km	5.5 Km	
MM version -18dBm launch, 62.5/125 fiber, 0.8 dB loss/km	37 Km	
MM version -37dBm launch, 9/125 fiber, 0.4 dB loss/km	27 Km	

OM-10C

Fiber Optic Serial Data Modem



Specifications (continued)

Electrical

Data rate for EIA530/A & V.35	any rate up to 384Kbps
Data rate for RS232	any rate up to 100Kbps
Bit rate clock on OM-10C DCE ³	1.2K, 2.4K, 4.8K, 9.6K, 19.2K, 56K, 64K, 112K, 128K, 256K, 384K
Data I/O connector	OM-10C-DCE DB25S (female) OM-10C-DTE DB25P (male)
Interfaces (switch selectable)	EIA-530, EIA-530A, RS-232, V.35
Power source (supplied)	6V regulated DC power cube
Supply voltage	5.6 to 6.8V
Power consumption (6V supply)	< 2.2 Watts

General

Operating temperature M and MM version	-40 C to 75 C
MTBF	>100,000hrs.
Humidity (RH)	10% to 95% (non condensing)
Dimensions	8 *1.6 * 5 cm

*Specifications subject to change without notice

I/O Interface

Switches on the side of the OM-10C are used to select any of the following interfaces: EIA-530, EIA-530A, RS-232, V.35. The modems will work with different interfaces at each end. For instance, one end may be configured as EIA-530 and the other as RS-232.

The OM-10C-DCE usually connects to an OM-10C-DTE; in this configuration, the modem simulates a straight through cable connection; however an OM-10C-DCE to OM-10C-DCE or OM-10C-DTE to OM-10C-DTE configurations is valid. Two possible configurations are shown on opposite page.

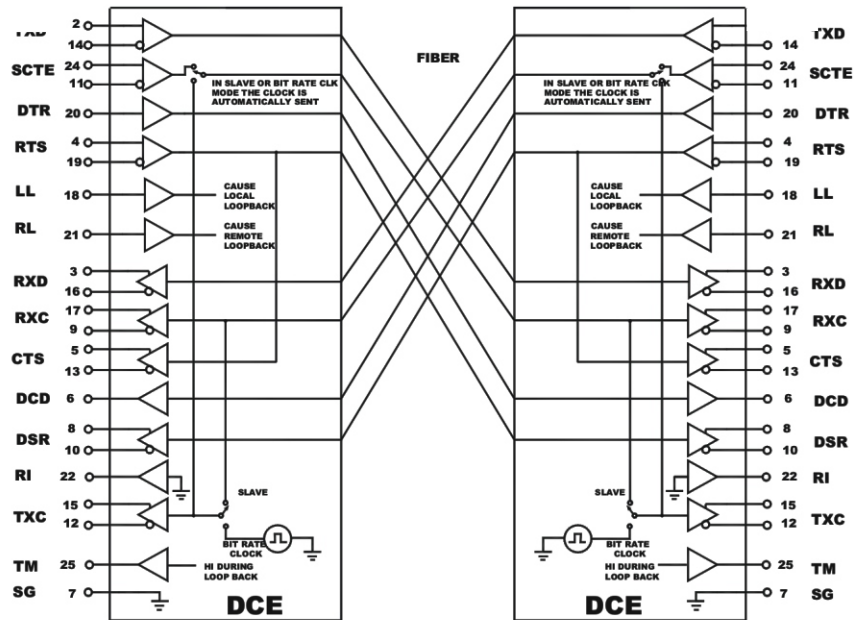
OM-10C

Fiber Optic Serial Data Modem

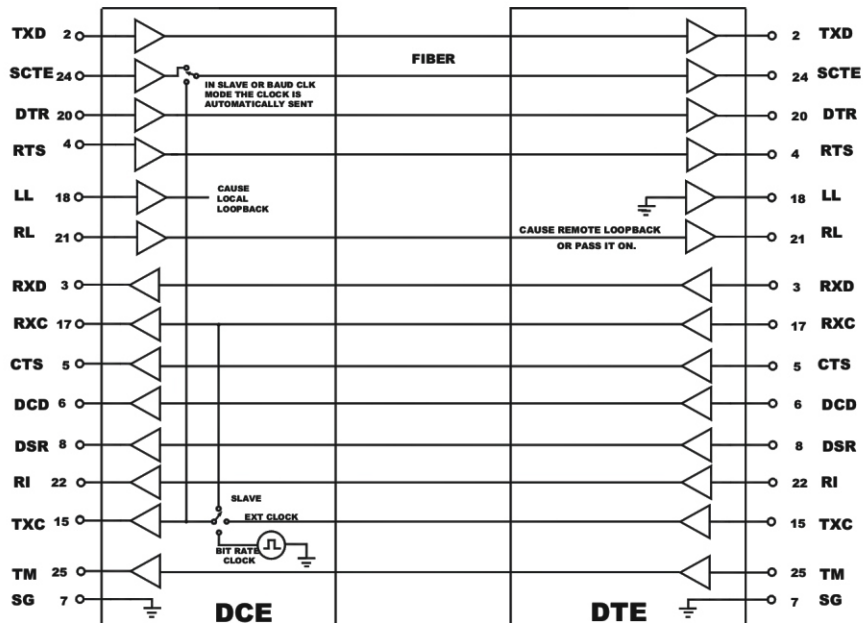


Interconnect Examples

EIA-530A DCE to DCE



RS-232 DCE to DTE



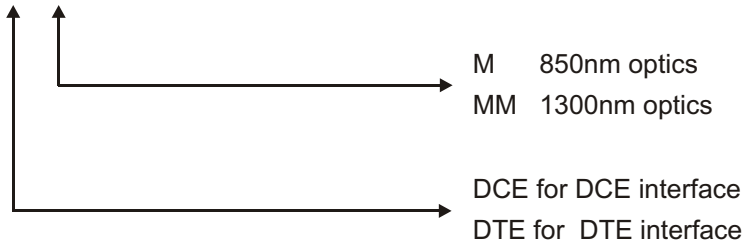
OM-10C

Fiber Optic Serial Data Modem



Part Numbers

OM10C-XX-YY-ST



Accessories (See www.luxcom.com for complete details)

Mounting Clip (MC-OM10B)

This is a machined plastic mounting clip which is used for surface mounting the modem. The clip may be mounted to any flat surface with user provided screws, or double-sided adhesive tape. The modem snaps into the clip.



I/O DCE-DTE

The I/O DCE-DTE is a DB25 to terminal block breakout box for the OM-10C modems



Mounting Panel, non-powered (MP-3)

Holds 6 modems. 1RU (1.75") high for 19" rack

Mounting Panel, powered (MP-3P)

Holds 6 modems and comes with a 120/240VAC supply. 1RU (1.75") high for 19" rack



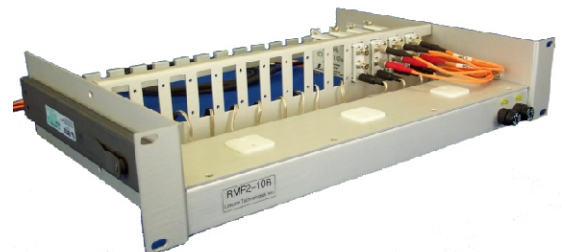
Mounting Panel powered (MP-3B)

Holds 6 modems and comes with 24VDC or 48VDC supply. 1RU (1.75") high for 19" rack (fully loaded MP-3B shown)



Rack Mount Unit For 14 OM-10C MODEMS (RMF-2-10B)

The mounting unit provides rack mounting for up to 14 OM-10C modems. The panel is 2RU (3.5") high, and fits a 19" wide rack. Two built-in power supplies give redundancy and reliability. The slide rails allow easy access.



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