LUXCOM Technologies Inc.

OM64TE

T1/E1 Fiber Optic Modem

Applications

- T1 Links
- E1 Links

Description

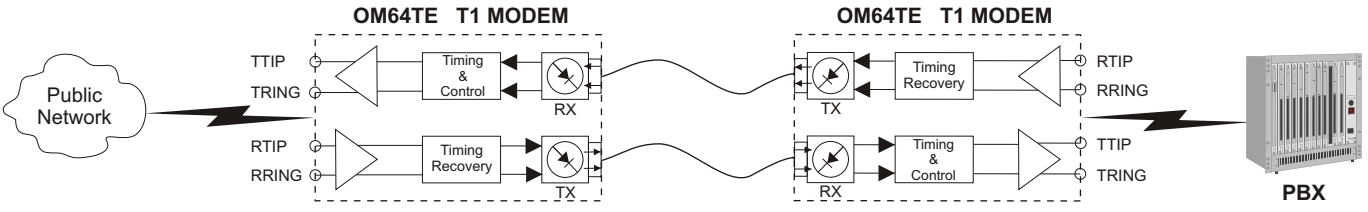
The OM64TE fiber optic modem transmits and receives four channels of T1 (1.544kbps) or E1 (2.048kbps) digital telephony data. The input digital signal is converted to an optical signal and transmitted full duplex across a pair of optical fibers. At the far end, the electrical signal is regenerated by a second Om64. The use of fiber optics as a cabling medium has several advantages, including data line security, total electrical isolation, lightning/surge protection, extended operating distances, and EMI/RFI immunity. The case is rugged, and RFI shielded for very low EMI/RFI emission. The modem has numerous features including remote monitoring and configuration. Pushing the Remote Display /Access Button causes the local display to show the remote OM64's display; pushing the button again, gives control of the remote modem via the local switches.

Features

- Multi-mode or singlemode fiber compatible
- Local & remote loop back function
- Remote display access
- Local & remote optical link indicator
- Alarm contacts for modem/link failure
- T1 cable length button.
- 4 Channel RJ45 interface
- Built-in BERT test function
- Twisted pair or coaxial interface
- Meets G.703, G.736 and G.775 standards
- Isolated 12, 24 or 48 Volt Power Supply option
- Configuration port for software updates

Typical Network Connection

The timing for each channel is independent of the other channels. One of the four ports of a simple network is shown below.



SINGLE CHANNEL

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Specifications

Optical

Light source		SLED or ELED
Operating Wavelength		1310 nm
Optical output	- 50/125 fiber	-22 dBm min.
	- 62.5/125 fiber	-19 dBm min
	- 9/125 fiber (SM option)	-15 dBm min
Optical Sensitivity	- multimode fiber, 10^{-10} BER	-32 dBm
	- singlemode fiber (SM option)	-34 dBm
Optical Connectors		SC or ST
Operating distance	- multimode fiber	> 5 Km
	- singlemode version	>20 Km

Electrical

Power Consumption	< 3 Watts
Input Voltage	
Option 0 12V DC external power cube	100 to 240VAC, 50-60Hz
Option 1 12V DC isolated supply	9V to 18V, 0.4A max.
Option 2 24V DC isolated supply	18V to 36V, 0.2A max.
Option 3 48V DC isolated supply	36V to 72V, 0.1A max.
Alarm contact rating	2A / 100V maximum

T1/E1 Interface

Standards	G.703, G.736, G.775
Input/Output levels	ITU-T G 703
Input Connector	Rj45
Line Impedance	110 Ohms balanced
T1 Line Code	AMI or B8ZS
T1 Data Rate	1544 Kbps
E1 Line Code	HDB3
E1 Data Rate	2048 Kbps

General

Operating Temperature	-40°C to +70°C
Humidity (RH)	10% to 95% (non condensing)
Dimensions (W*H*D)	14cm*4cm*20cm
Weight	< 1 Kg
MTBF	> 30,000 hrs

*** Specifications are subject to change without notice.**

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ORDERING INFORMATION

Part Numbers

OM64TE-XX-YY-ZZ

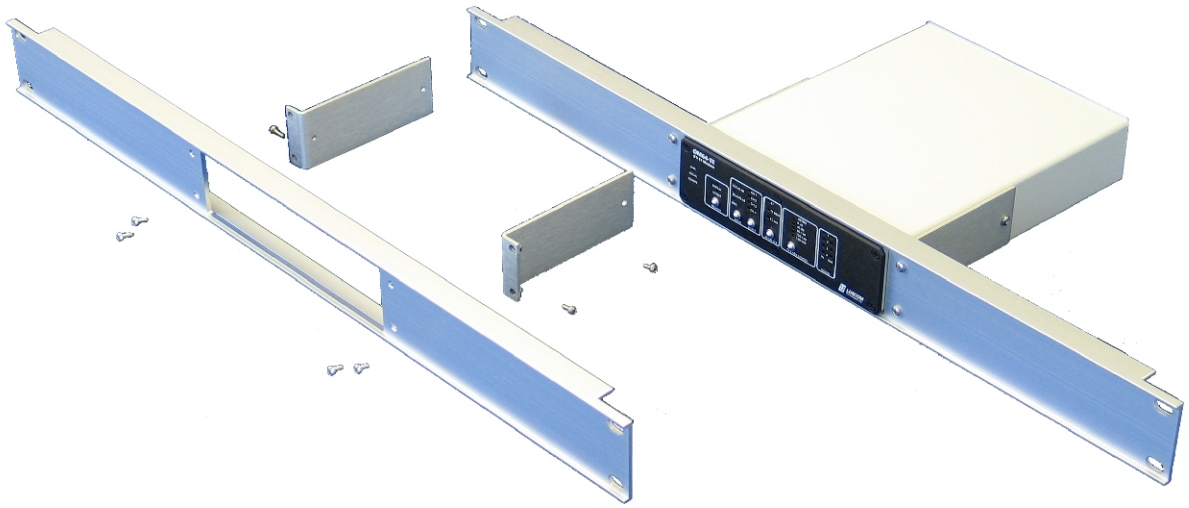
0 = 100 to 240VAC, 50-60Hz input power cube
1 = 12VDC input power supply
2 = 24VDC input power supply
3 = 48VDC input power supply

SC = SC type optical connector
ST = ST type optical connector

MM = 1300nm multi-mode optics
SM = 1300nm single-mode optics

ACCESSORIES

Rack Mount Panel (Part # MP-11)
This 19 inch, 1RU mounting pane, holds one OM64 modem. It comes complete with all necessary hardware, with the exception of the mounting screws necessary to attach the panel to the rack.



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Ruggedized Case (Part # RC1)

This watertight case holds one OM64 modem mounted on a rack mount panel for mobile applications. The lid has an organizer for holding fibers and hook-up cables.

LUXCOM Technologies Inc.
102 Walgreen Road, Ottawa, Ontario K0A 1L0 Canada Tel.: +1 (613) 831-7777 Fax: +1 (613) 831-7778
email: sales@luxcom.com
www.luxcom.com

06/09/06