

# OM 15E

## Fiber Optic E1 Modem

### Applications

- E1 Links



### Description

The OM15E fiber optic modem provides a highly reliable point-to-point link between two E1 telephony devices. Two 1 modems at each end can also be connected in hot standby mode, with automatic switch-over in the event of a failure. The modems use either singlemode or multimode fiber

interchangeably. The nine different diagnostic LEDs provide extensive display of operational status. The OM-15E supports HDB3 line codes and reduces jitter from transmitted data.

### Features:

- Multi-mode or singlemode fiber compatible
- MIL-STD-461C qualified
- Protection Switching capability
- Local & remote Loop Back Function
- Electrical Input signal loss indicator
- 5 Year warranty
- Alarm contacts for modem/link failure
- Meets G.703, G.736 and G.775 standards
- Built In Test Function
- Isolated 12, 24 or 48 Volt Power Supply option
- Local & remote optical link indicator
- Extended temperature range

### Specifications

#### Optical

Light source .....	850 nm SLED M version
	1300 nm SLED MM version
	1300 nm ELED SM version
Optical connectors .....	ST
Optical sensitivity .....	-51 dBm ( $10^{-10}$ BER)
Operating distance	
M version -18dBm launch, 62.5/125 fiber, 3 dB loss/Km .....	14 Km
M version -36dBm launch, 9/125 fiber, 2 dB loss/Km .....	7 Km
MM version -18dBm launch, 62.5/125 fiber, .8 dB loss/Km .....	41 Km
MM version -37dBm launch, 9/125 fiber, .4 dB loss/Km .....	35 Km

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### Specifications

#### Electrical

E1 Data rate .....	2,048 Kbps
E1 Line code.....	HDB3
Standards .....	G.703, G.736, G.775
Certification .....	MIL-STD-461C Navy CS01, CS02, CS06, RE01, RE02, CE01, CE03, RS01, RS02, RS03
Line Impedance E1 .....	Coaxial 75 ohm, Balanced 120 ohm
Input/Output connector .....	Coaxial BNC, Balanced DB15S
Input/Output levels.....	ITU-T G 703
Power input .....	9 V to 18V DC
Supply current .....	0.2A max. current draw
Optional 24V DC isolated supply .....	18V to 36V, 0.09A max. current draw
Optional 48V DC isolated supply .....	36V to 72V, 0.045A max. current draw
Alarm contact rating .....	2A @ 100V maximum

#### General

Operating temperature .....	-40°C to 74°C
Humidity (RH) .....	10% to 95%
Dimensions (H*W*D) .....	2.5cm * 11cm * 17cm
Mounting method .....	Desktop, or optional 19" rack mounting

#### Diagnostic Capability

Local loop back.....	Front panel switch activated
Remote loop back. ....	Front panel switch activated
Built-in test .....	BITS function on front panel
Mounting method .....	Desktop, or optional 12 unit rack

\*Specifications subject to change without notice.

# OM-15E

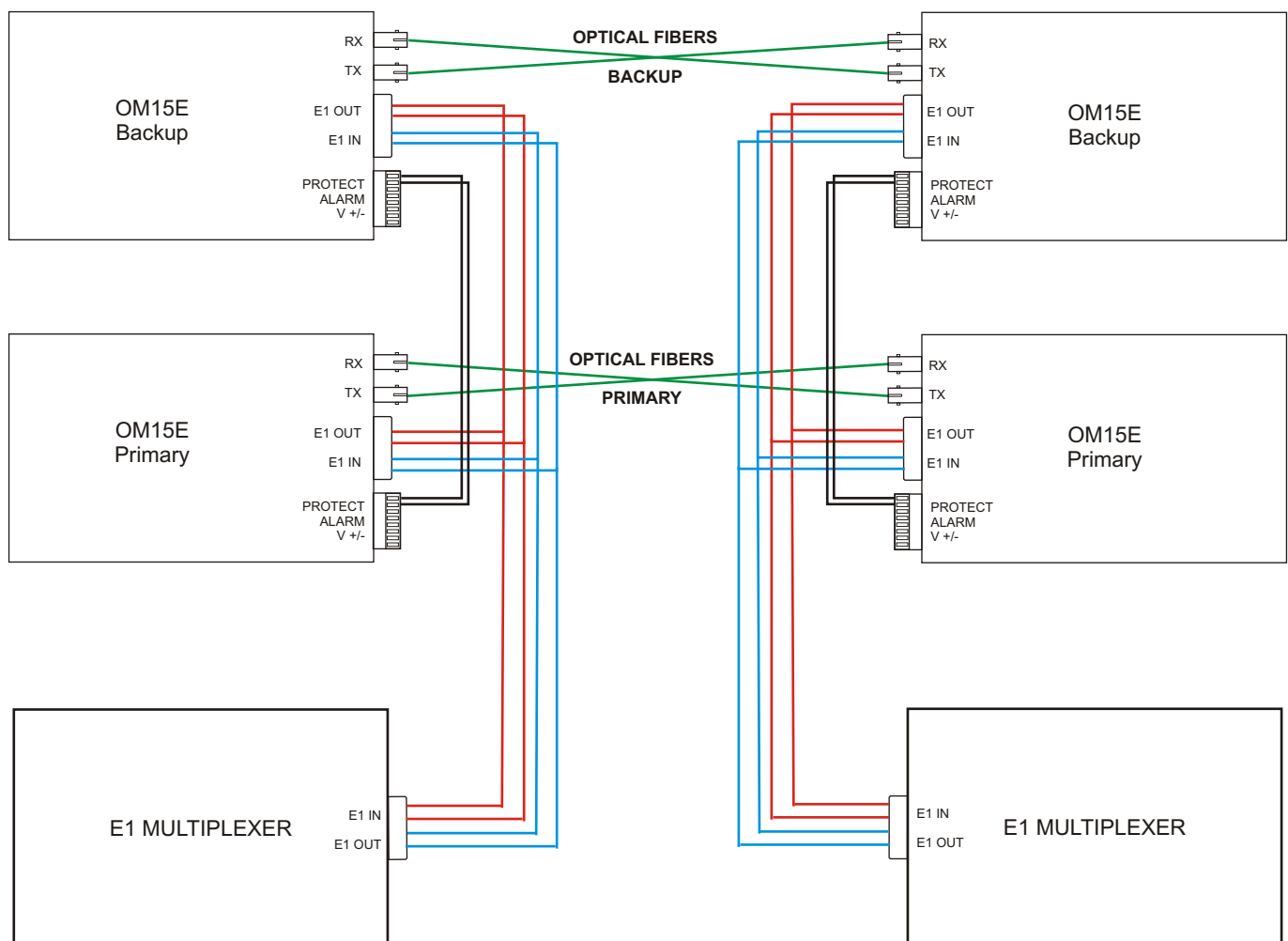
## Fiber Optic E1 Modem



### Protection Switch Configuration (hot standby)

For protected mode operation (hot standby), two OM-15E modems are used per end. A front panel switch is set as Pri (Primary) on one modem and as Sec. (Secondary) on the other modem. The E1 input and output are common to both modems as shown. A control cable is connected between the two modems. When everything is operating correctly, the primary modem pair is used for E1 traffic. If failure occurs ( fibre failure, power supply failure, modem failure, etc.) traffic is automatically switched over to the secondary pair of modems.

Once the fault has been cleared and the Primary is functioning correctly, the link will revert to operation on the primary link.



Using the OM15E in Hot Standby

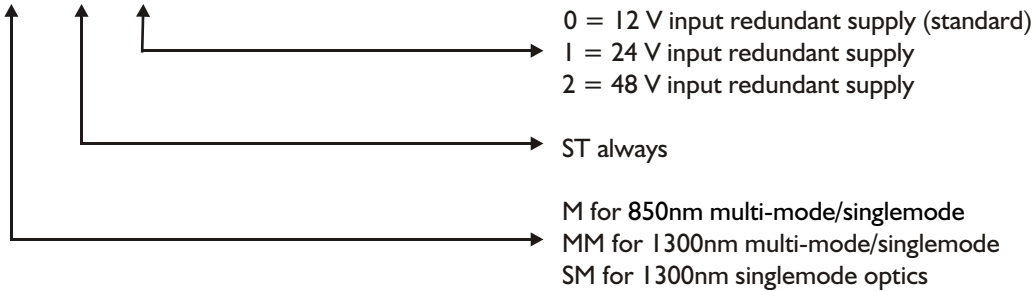
# OM-15E

Fiber Optic E1 Modem



## Part Numbers

OM15E - WW - XX - YY



## Accessories

**MB1**

**RMF3**

**51-146-3**

**51-146-5**

**51-141-3**

**51-146-4**

Mounting Bracket for one OM15E

Wall Mount Chassis for 12 OM15Es

66 pin Circular I/O Connector (used on RMF-3 rack)

66 pin Circular I/O Connector Backshell

3 pin Circular Power Connector (used on RMF-3 rack)

3 pin Circular Power Connector Backshell

See [www.luxcom.com](http://www.luxcom.com) for more details on these accessories.

Rev.1.1

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