

OM1001E

Fiber Optic Ethernet Media Converter
10/100/1000BASE-T to 1000BASE-X

Applications

- Secure data environments
- Noisy RFI environments - factory floor
- 10/100/1000 Mbps communication systems
- Can be used to implement a low cost Fiber Optic hub



Description

The OM1001E media converter connects a 10/100/1000BASE-T device to a 1000BASE-X device. The RJ-45 twisted-pair port operates at 10, 100 and 1000 Mbps, full and half-duplex. Auto mode provides plug-and-play operation; alternately the twisted-pair port can be configured with switches to force duplex, speed, and crossover. The OM1001E does not support Jumbo Packets. Optics are available for multimode, singlemode and single fiber applications. Two OM1001Es can be optically connected together in order to interconnect widely separated networks. The OM1001E has an extended input voltage range of 4.5V to 32V. This product supersedes the OM1001.

Features

- Shielded RJ45 10/100/1000BASE-T compatible twisted-pair port
- 1000BASE-SX/LX/LX10/BX10 compatible optics
- Auto or manual configuration
- Link Pass Through support
- 5 Year warranty
- SC, ST or LC optical connectors
- Single bidirectional fiber option
- Wide temperature range (-40°C to 75°C)
- Extended input voltage (4.5V to 32V DC)
- Extended distance options (40, 80 and 100 km)
- 802.3, 802.3ab, 802.3u, 802.3z compatible

Specifications*

Optical

Model	Light Source	Fiber Size	Optical Output Minimum	Optical Sensitivity ¹ Maximum	Optical Range ²	Connectors
SX	850 nm laser	50/125 µm	-9 dBm	-18 dBm	550 m	SC, ST or LC
SX	850 nm laser	62.5/125 µm	-9 dBm	-18 dBm	275 m	SC, ST or LC
LX	1310 nm laser	50/125 µm	-9 dBm	-20 dBm	1 km	SC, ST or LC
LX	1310 nm laser	62.5/125 µm	-9 dBm	-20 dBm	1 km	SC, ST or LC
LX	1310 nm laser	9/125 µm	-9 dBm	-20 dBm	10 km	SC, ST or LC
LXE	1310 nm laser	9/125 µm	-3 dBm	-23 dBm	40 km	SC, ST or LC
BU	1310 nm TX laser	9/125 µm	-9 dBm	-20 dBm	20 km	SC, ST or LC
BD	1550 nm TX laser	9/125 µm	-9 dBm	-20 dBm	20 km	SC, ST or LC
ZX ^{3,4}	1550 nm laser	9/125 µm	0 dBm	-23 dBm	80 km	SC, ST or LC
ZXE ^{3,4}	1550 nm laser	9/125 µm	0 dBm	-32 dBm	100 km	SC or LC

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Specifications (continued)

Electrical

Data I/O levels	IEEE 802.3 compatible
Data I/O connector	RJ-45
Power source (supplied)	5V DC power cube
Supply voltage	4.5-32V DC
Power consumption	2.3 Watts

General

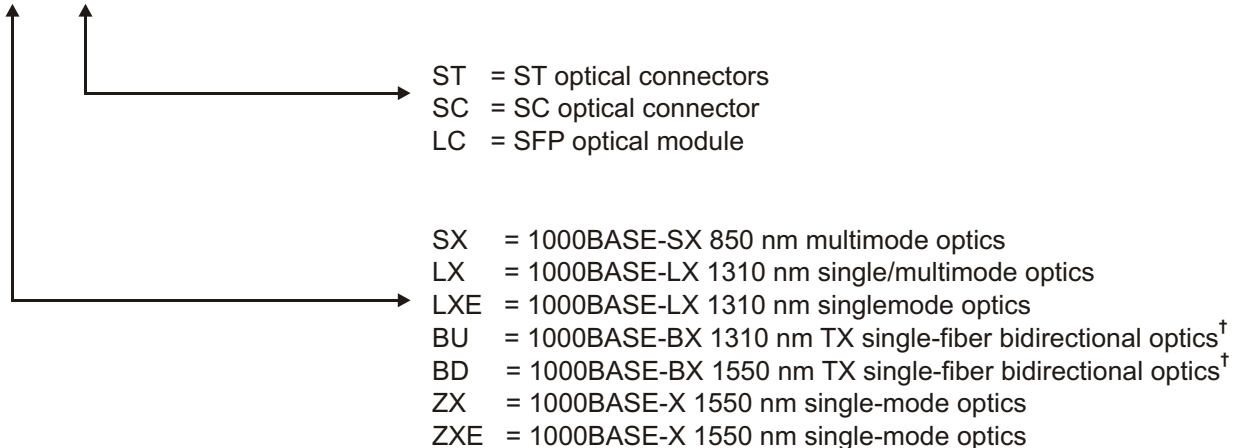
Operating temperature	-40°C to 75°C
Humidity (RH)	10% to 95%
MTBF	> 50,000 hours
Dimensions	6.5 x 1.8 x 10 cm

Notes:

- * Specifications are subject to change without notice.
- ¹ Optical sensitivity measured at 10⁻¹⁰ BER.
- ² The optical range values are for typical fiber.
- ³ Operating temperature range is 0°C to 70°C.
- ⁴ ZX and ZXE supersede S80 and S100

Part Numbers

OM1001E XX - XX



[†] The single-fiber models must be used in upstream/downstream pairs (one BU and one BD).

Accessories for the OM1001E can be found at www.Luxcom.com

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