

## ***EtherNodePlus*** Model OTEN-MC-01 Media Converter, 10/100/1000M, SFP

### Features / Benefits

**Converts optical and electrical Ethernet signals between a 10/100/1000M UTP interface (Tx) and a 1000M optical fiber interface (Fx).**

Auto-negotiation function allows UTP ports to auto-select 10/100/1000Mb/s and full-duplex or half-duplex.

UTP port supports MDI/MDI-X auto crossover.

Multimode fiber transmission up to 550m; single-mode fiber transmission up to 70km.

The units support the maximum 1536 byte Ethernet packet and flow control.

Wide operating temperature of 0°C to +50°C.



The OLSON TECHNOLOGY, INC. Model OTEN-MC-01 *EtherNodePlus* Media Converter, 10/100/1000Mb/s allows network operators to convert signals between an electrical Ethernet 10/100/1000Mb/s UTP interface and an optical interface. The traditional 10/100/1000Mb/s gigabit Ethernet can be extended to the distance of 70km through a fiber optic link.

The OTEN-MC-01 incorporates the latest gigabit IC technology. Indicator LEDs on the front panel allow the unit's working conditions to be fully monitored, simplifying installation and maintaining network performance.

## System Specifications

### Ethernet Specifications

Standards: IEEE802.3z/AB, 10/100/1000Base-T and 1000Base-SX/LX/HX

Cables: UTP Category 5e or Category 6 (100m max. distance)  
50/125µm Multimode Fiber (550m max. distance)  
9/125µm Single-mode Fiber (80+km max. distance)

Connectors: UTP: RJ-45, 10/100/1000Mb/s  
Fiber: LC, 1000Mb/s

Mac Add. Table: 4K

Data Buffer: 256K

Flow Control: Full-duplex IEEE802.3x  
Half-duplex back pressure

### Electrical and Environmental Characteristics

	Min	Typ	Max	Units
Convert Power Requirements (Note 1)		5 270		V <sub>DC</sub> mA
Power Supply Voltage	100 50		240 60	V <sub>AC</sub> Hz
Operating Temp. Range	-0		+50	°C
Storage Temp. Range	-20		+70	°C
Humidity (RH Non-Cond.)	5		90	%

Note 1) Using Model OTOLS-1312-30 SFP module.

### LED Indicators

100 Lit when TP speed is 100Mb/s.

1000 Lit when TP speed is 1000Mb/s.

Link/Act Lit when TP connection is good.  
Blinks when collision signal is present.

FDX Lit when TP full-duplex mode is active.  
OFF when TP half-duplex mode is active.  
Blinks when collision signal is present.

FX Lit when TP connection is good.  
Blinks when TP data is transmitting.

PWR Lit when unit is powered.

Notes: 1) TP stands for Twisted Pair. It is the copper connection.

### Physical Characteristics

	Min	Typ	Max	Units
Weight		6.4		oz.
		180		g
Weight w/ 2 SFP Modules		6.9		oz.
		195		g
Dimensions (L x W x H)	1.02 x 2.75 x 3.66			in.
	26 x 70 x 93			mm



**Table 1 - Typical Performance with Different SFP Modules**

Fiber Type	Max. Distance	Wavelength	Tx Power	Sensitivity	Link Budget
50µm Multimode	550m	850nm	-11 to -6dBm	<-18dBm	7dBm
Single-mode	30km	1310nm	-8 to 0dBm	<-25dBm	17dBm
Single-mode	80km	1550nm, CWDM	-5 to 0dBm	<-25dBm	20dBm

### Ordering Information

Model OTEN-MC-01	Media Converter; 10/100/1000M SFP Slots Media Converter, No SFP Module, with Power Supply
Model OTOLS-8512-02	1.25Gb/s SFP Module, MM, 850nm
Model OTOLS-1X12-XX	1.25Gb.s SFP Module, SM, 1310nm, 1550nm, CWDM
Model OTOLS-B11X12-XX	1.25Gb/s SFP Module, SM, 1310nm/1550nm