

- 1000BaseT to 1000BaseSX/LX single/dual converter modules
- Complies with 802.3ab 1000BaseT and 802.3z 1000BaseSX/LX
- Auto-Negotiation on copper and fiber ports (HDX/FDX)
- Flow control (Pause) support on copper and fiber ports
- Extended UTP cabling support
- Automatic MDI/MDIX crossover and polarity correction
- F/O segment extension up-to 220/550m (MM) and 70Km (SM)
- Single Fiber options up-to 50Km
- Available with ST, SC, MT-RJ or LC F/O connectors
- Enhanced LED indications
- Manageable
- Plug & play, hot swappable, slot independent module

## Gigabit Ethernet Converter

### 1000BaseT to 1000BaseSX/LX



The modules are Gigabit Ethernet fiber optic converters, offering bi-directional conversion between Gigabit fiber and Gigabit copper networks in compliance with IEEE 802.3 standards. The modules extend the span of your Gigabit network to up-to 70 Km.

The modules supports auto-negotiation for the duplex and flow control operation modes. The copper port(s) supports auto MDI crossover and polarity correction, as well as superior performance of up-to 180m full duplex Gigabit operation over standard CAT 5 cables. The fiber port(s) are available with a choice of 850nm (SX) interface supporting distances of 220/550m over 62.5/50 micron MM fibers respectively, or (LX) 1300nm/1550nm interfaces supporting distances up-to 70Km over SM fibers. The F/O interfaces are available with ST, SC, MT-RJ or LC connectors.

One variant is available in Single Fiber (SF) version, supporting distances up-to 50Km over single SM fiber. The SF versions use dual wavelength WDM technology that assures better isolation and link performance. A SF link is sold in pairs, type-A (TX-1550nm, RX-1300nm) on one end and type-B (TX-1300nm, RX-1550nm) on the other end.

The modules Gigabit physical layer (PHY) converters consist on advanced DSP technology that provides highly reliable robust solution for any Gigabit link.

Color LED indicators provide easy monitoring of the operation and status of each port.

To maximize efficiency and minimize installation costs, the modules can be installed in the 19" chassis with 16, 4, 2 or single slot modular cabinet, saving rack space and main outlets as well as providing flexibility and easy service and maintenance. The chassis support optional redundant power supply and central SNMP management. All chassis are available with wide range AC or DC power supplies.



**Technical Data**

Gigabit Ethernet 1000BaseT to 1000BaseSX/LX Converter Modules

**1000BaseT Port(s)**

4 pairs RJ-45 connector(s)
Auto-negotiation (Duplex, Flow control)
Auto MDI crossover and polarity correction
Up-to 180 meter (590 ft) over CAT 5 cable

**LED Indicators (per port)**

1000BaseT RJ-45 Port(s)	Link - copper link established
	TX - data transmitted by the port
	RX - data received by the port
1000BaseSX/LX F/O Port(s)	FDX - the port operated in FDX mode
	Link - F/O link established

**Special Features**

Auto MDI crossover
Auto polarity correction
Next page capabilities

IEEE 802.3ab - 1000BaseT
IEEE 802.3z - 1000BaseSX/LX
Pause capabilities flow control

**Technology**

Physical Layer Converter
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**Dimensions (Module)**

Height	Width	Depth
130mm (5.1")	25.4mm (1")	140mm (5.5")

**1000BaseSX/LX port(s)**

• Interface			
Multimode	850nm	SC, ST, MT-RJ	
Singlemode	1300nm	SC, MT-RJ, LC	
	1550nm	SC	
• Distance/Power Budget			
Multimode	62.5/50µ	220/550m	5dB
Singlemode	9/125µ	10km 25km 40km 70km	
		5dB 10dB 17dB 17dB	
• Single Fiber (dual wavelength) Distance/Power Budget			
Singlemode	9/125µ	25Km	50Km
min power budget:		10dB	19dB

**Electrical Characteristics (Installed in Chassis)**

Chassis main Input Voltage	90 - 240 VAC or 9 - 72 VDC
Frequency	47 - 440 Hz
DC Power Consumption (PU)	single port - 1.0 PU
(Power Units per module)	dual port - 1.8 PU

**Safety & Emission**

CE, FCC Part 15, EN60950
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**Environment**

	°C	°F
Operating Temperature	0 to 45	32 to 113
Storage Temperature	-30 to 65	-22 to 149
Humidity	10% to 90% non-condensing	