

Model 3151



Ethernet to Fiber Optic Media Converter - Shielded



Features:

- Supports 10 Base-T/100 Base-TX and 10 Base-FL/100 Base-FX Standard
- Designed for use in harsh environment
- ST optical connectors
- Auto senses between 10 and 100 Mbps speeds
- Plug & Play - No Setup Required
- Improved EMI/RFI protection

S.I.Tech 3151 Ethernet media converter is designed for use in a harsh environment and connection of Ethernet based equipment over fiber optic cable at 10 Base-T/100 Base-TX and 10 Base-FL/100 Base-FX. It uses Multimode or Single mode fiber with ST connectors. Model 3151 auto senses and switches between 10 and 100 Mbps.

Notes:

1. The 3151 and 2151 pair auto negotiates between 10 Base-T and 100 Base-Tx and chooses the best mode of operation (half/full duplex, 10/100 Mbps). If one of the connecting ports also supports operation at 1000 Base-T - Gigabit (e.g., 10/100/1000Mbps NIC), the 3151 and 2151 pair will auto negotiate to the best mode of operation not exceeding 100 Mbps however, one of the connecting ports must be limited to 10 or 100 Mbps operation.
2. Use with metallic plug, using tri start thread coupling mechanism (Mil-DTL-38999 series III type) with anti-decoupling device for high vibration.
3. Applications: railways, radars, shelters, battle field communication systems, navy, shield rooms.

- Operation Mode:** 10 Base-T/100 Base-TX and 10 Base-FL/100 Base-FX, Auto 10/100 Sensing
- Input/Output Interface:** Shielded RJ45 for harsh environment
- Transmission Line Interface:** ST optical connector is standard
- Transmission Distance:** See distance chart
- Transmitter Output Power:** 30 Microwatts into 62.5/125 micron fiber
- System Wavelength:** 1300 nm Multimode (Single mode Option)
- Data Rate:** 10/100 Mbps
- Bit Error Rate:** 10^{-9}
- Receiver Sensitivity:** 10 Microwatts @ 1300 nanometers
- Operating Temperature:** 0 °C to 50 °C
- Weight:** 2 lbs
- Input Power:** External with power supply (S.I.Tech #2164 - 100 to 240 VAC, 50/60 Hz, to 12VDC, UL, CSA, CE, & TUVGS Listed)(216A-L Linear PS)
- Metal Enclosure:** 9.37"X4.25"X1.75" (23.8X10.8X4.4 cm) Totally shielded

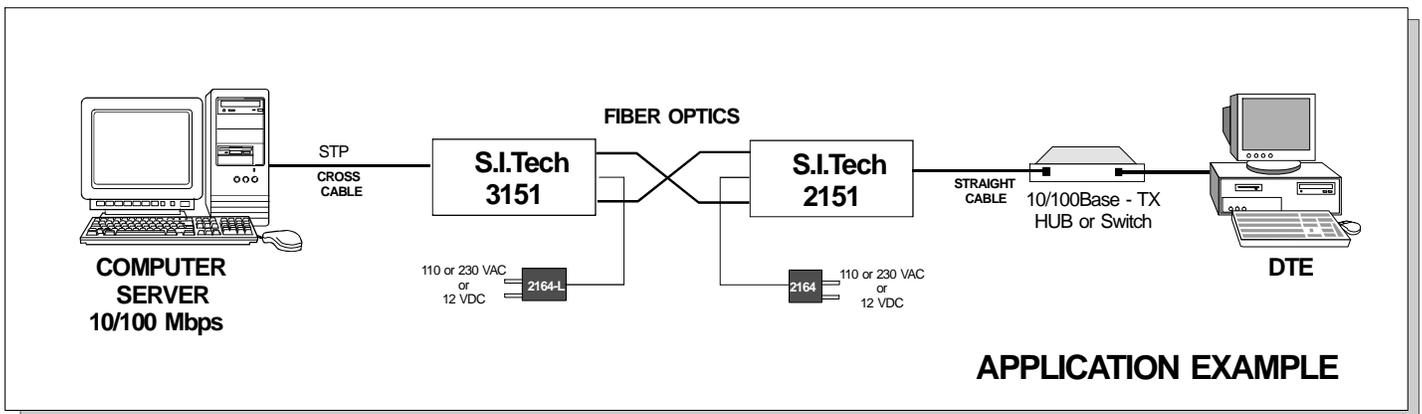
Operating Distance for Fiber Optic Cable

Fiber Size (Microns)	Attenuation (dB/Km)			Distance (Meters)			Distance (Feet)		
	Wavelength (nm)			Wavelength (nm)			Wavelength (nm)		
	850	1300	1550	850	1300	1550	850	1300	1550
50	3.0	1.0	-	2000	6000	-	6600	20000	-
62.5	3.5	1.0	-	2000	6000	-	6600	20000	-
10**	1.0	0.35	0.25	-	10000	12000	-	33000	40000

** Single mode option - 1300nm (for longer distances, high power, contact factory)

Optical Unit Connection: Connect the optical transmission line to the T and R receptacles. Note which cable channel goes to T or R by noting cable imprint. On the other end, reverse the connections.

UL & CSA listed. Meets FCC requirements of Class B, Part 15 Computing Devices Standard. Specifications subject to change without notice.



APPLICATION EXAMPLE