Model 2151

Industrial Ethernet to Fiber Optic Media Converter



Operation Mode: Auto Negotiation and Manual Settings Shielded RJ45 Input/Output Interface: Transmission Line Interface: ST optical connector is standard (SC, MT-RJ or LC optional) Transmission Distance: See distance chart Transmitter Output Power: 12 Microwatts into 62.5/125 micron fiber (-19dBm) System Wavelength: 1300 nm Multimode (Single mode Option) Data Rate: 10/100 Mbps Bit Error Rate: 10 -9 Receiver Sensitivity: 1 Microwatts @ 1300 nanometers (-30dBm) Operating Temperature: -40°C to 70°C Humidity: 0 to 95% Non Condensing Weight: 0.8 lb (365 grams) Input Power: 10 to 32VDC, 3 Watts Redundant Power Input Metal Enclosure: 4.15" X 3.65" X 1.21" (10.54 X 9.27 X 3.00 cm) **DIN Rail Mounting**

> Meets FCC requirements of Class A, Part 15 Computing Devices Standard.

Specifications subject to change without notice.



Features:

Supports 10 Base-T/100 Base-TX (IEEE 802.3) MDI Using Auto Negotiation or Manual Settings (Rate, Duplicity, Flow Control) Small size

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- Mode Switches
- · Power, Link Status, Activity, and Rate LED indicators
- ST, SC or MT-RJ for Multimode optical connections, SC or LC options for Single Mode
- Auto MDI-X Detection of Straight or Crossover Cables with Correction
- Plug & Play
- · Redundant Power Input
- · Conformal Coated
- Ruggedized Metal Enclosure (IP 40)

S.I.Tech 2151 Ethernet media converter is a compact adapter for connection of Ethernet 10 Base-T/100 Base-TX equipment over fiber optic cable at 100 Base-FX. It uses ST, SC or MT-RJ for Multimode fiber and SC or LC for Single mode fiber.

During auto negotiation, the 2151 pair choose the best common mode of operation (half/full duplex, 10/100 Mbps).

The unit contains LED indicators to provide visible verification of transmission status and media converter functions.

Operating Distance for Fiber Optic Cable										
	Fiber Size (Microns)	Attenuation			Distance			Distance		
		(dB/Km)			(Meters)			(Feet)		
		Wavelength (nm)			Wavelength (nm)			Wavelength (nm)		
		850	1300	1550	850	1300	1550	850	1300	1550
ſ	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	-	20000	24000	-	66000	80000

** 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.

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