

Industrial Ethernet to Fiber Optic Media Converter



Operation Mode: Auto Negotiation and Manual

Settings

Input/Output Interface: Shielded RJ45

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

Features:

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

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

Specifications subject to change without notice.



