

Ethernet to Fiber Bit-Driver



Features:

- Supports IEEE 802.3x 10/100/1000Base-T/1Gbps twisted pair link
- Meets IEEE 803.3x clock jitter and frequency variation specifications.
- Automatic speed detection and adjustment 10/100/1000
- Full duplex operation
- Auto MDI/MDI-X (Automatic detection of straight or crossover twisted pair cables)
- Automatic master/slave determination
- ST optical connectors standard
- Wide range input power: 5 to 60 VDC, 10W
- Designed for use in harsh environment
- Improved EMI/RFI protection
- Available with 850nm multimode or 1310nm or 1550nm single mode optics
- Multiple optical power configurations to support 5, 10, 20 to 80 Km fiber runs (single mode only)

The S.I.Tech 3160 Bit-Driver is intended to extend the length of Ethernet links to up to 80Km for long haul backbone applications. Once installed the 3160's are completely transparent to the system. Units must be installed in pairs.(3160 and 2160)

Network timing limitations and fiber attenuation and bandwidth may limit maximum transmission distance to less than maximum.

Notes:

1. The PC, Switch, or Hub to which S.I. Tech 3160 is attached must support "Auto Negotiation, i.e. Auto 1000, Auto 100 or Auto 10 Mbps."
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.

OPERATING DISTANCE FOR OPTIC CABLE

FIBER SIZE (Microns)	ATTENUATION dB/Km		BANDWIDTH MHz/Km		DISTANCE Meters*		DISTANCE Feet*	
	850 nm	1310 nm	850 nm	1310 nm	850 nm	1310 nm	850 nm	1310 nm
50	3.0	1.0	600	600	500	600	1600	1800
62.5	3.5	1.0	200	600	200	600	660	1800
10 SM	Unspecified	0.4	Unspecified	Unspecified		20000		66000

SM - Single mode (High power - long distance option)

* At gigabit data rate, both attenuation and bandwidth of the fiber should be considered to determine distance limit.

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.

TYPICAL APPLICATION

