

CAN Bus to Fiber Repeater



Features:

- Asynchronous, CAN Bus protocol
- 6600 ft. (2 Km) distance capability
- 0 °C to + 70 °C operating range (extended temperature option)
- ST connector receptacle
- Data speed: 1 Kbps to 1 Mbps
- ISO 11898 Specifications
- Use 120 ohm Termination at both ends of Network
- DIN Rail Mounting
- Status indicators - Tx, Rx, and Power
- Supports CAN 2.0A and CAN 2.0B

- Operation Mode:** Asynchronous, CAN Bus
- Input/Output Interface:** CAN Bus, Terminal block
- Transmission Line Interface:** ST connector is standard for interfacing with fiber optic cable
- Transmission Distance:** See distance chart
- Optical Power into a 50 Micron Core Optical Fiber:** 10 microwatts, 10 dB power budget* @ 850 nanometers
- Receiver Sensitivity:** 1 microwatts at less than 10⁻⁹ bit error rate
- Operating Temperature:** 0 °C to 70 °C
- Enclosure Size:** 4 x 3.5 x 1 in (10 x 9 x 2.5 cm)
- Weight:** 1.0 lb
- Input Power:** External with power supply (S.I. Tech #2163-DIN 110VAC to 24 VDC) or 8 to 16VDC or 24VDC, 130mA
- 230V Version:** Use S.I.Tech 2163-DIN power supply

CAN Bus (Controller Area Network) is commonly used in various vehicles, automobiles, and industrial automation applications. CAN Bus allows microcontrollers and attached devices to communicate with each other in applications without use of a host computer.

Use of fiber optic repeaters allows electrical isolation between nodes of a network and attached devices, protecting them from electrical surges and providing EMI/RFI immunity. Use of fiber also allows for longer distances between nodes when required. (Observe network turn around timing restrictions)

OPERATING DISTANCE FOR FIBER OPTIC CABLE

Fiber Size (Microns)	Attenuation dB/Km	Distance Meters*	Distance Feet*
50	3.0	2000	6600
62.5	4.0	2000	6600
8 SM**	1.0	10000	33000

* High power option available ** Single mode option

Electrical isolation provides the benefits of EMI/RFI immunity, electrical surge immunity, less impedance problems and elimination of crosstalk.

Meets FCC requirements of Class A, Part 15 Computing Devices Standard.
Specifications subject to change without notice.

