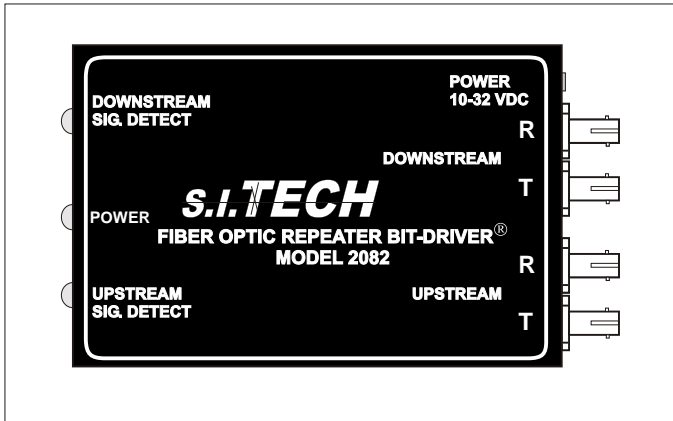


# Optical Repeater Mini Bit-Driver



**Features:**

- Data Rates from 10 Mbps to 1000 Mbps full duplex
- Optical repeater compatible with **Ethernet** or other LANs, WAN, Switches, and Routers
- Powered by S.I.Tech #2164 Power Supply
- Multimode or single mode option
- Status indicators
- Single fiber option
- Convert multimode to single mode

S.I.Tech 2082 is designed to be used as a repeater on fiber optic links. It can be used to extend the distance of a network link up to 10 Km with single mode fiber or it can also be used to convert from multimode to single mode fiber.

- Operation Mode:** Full duplex NRZ or encoded data  
**Input/Output Interface:** ST connectors (SC, FC option)  
**Transmission Distance:** See distance chart  
**Transmitter Output Power:** 10 dB power budget (10 Km single mode option)  
**Metal Enclosure:** 5.75" X 3.8" X 1.0" (14.6 X 9.6 X 2.54 cm)  
**Weight:** 1.0 lb (450 grams)  
**Input Power:** External with power supply (S.I.Tech #2164 - 100 to 240VAC to 12VDC)

**ORDERING INFORMATION**

Model Number	Description
2082 - MM/MM - 100	Multimode 50/62.5 to Multimode 50/62.5 Repeater for up to 100 Mbps, ST standard. SC option
2082 - MM/MM - 1000	Multimode 50/62.5 to Multimode 50/62.5 Repeater for Gigabit. SC standard
2082 - MM/SM - 100	Multimode 50/62.5 to Single mode Converter for up to 100 Mbps. ST or SC to SC
2082 - MM/SM - 1000	Multimode 50/62.5 to Single mode Converter for Gigabit. SC to SC
2082 - SM/SM - 100	Single mode to Single mode Repeater for up to 100 Mbps. SC to SC
2082 - SM/SM - 1000	Single mode to Single mode Repeater for Gigabit. SC to SC

**Notes:**

1. Single mode (1300nm) is supplied with SC connectors as standard (FC optional).
2. **Check fiber bandwidth spec to determine length limitation.**
3. Check link loss (attenuation).
4. Single fiber option.
5. For proper operation 2082 optical repeater or fiber size converter should be matched to customer equipment e.g. If your Transmitter/ Receiver is 850nm, S.I.Tech 2082 TR/REC should be 850nm. For 1300nm use 1300nm rated 2082.

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

*Specifications subject to change without notice.*



**Operating Distance for Fiber Optic Cable**

Fiber Size (Microns)	Attenuation (dB/Km)			Distance-100Mbps (Meters)			Distance-1000Mbps (Meters)			Distance-100Mbps (Feet)			Distance-1000Mbps (Feet)		
	Wavelength (nm)			Wavelength (nm)			Wavelength (nm)			Wavelength (nm)			Wavelength (nm)		
	850	1300	1550	850	1300	1550	850	1300	1550	850	1300	1550	850	1300	1550
50	3.0	1.0	-	2000	6000	-	500	600	-	6600	20000	-	1600	2000	-
62.5	4.0	1.0	-	2000	6000	-	200	600	-	6600	20000	-	600	2000	-
10*	-	0.35	0.25	-	10000	12000	-	20000	25000	-	33000	40000	-	66000	82500

\* Single mode option (for longer distances, high power, contact factory)

At Gigabit data rate both attenuation and bandwidth of the fiber should be considered to determine distance.

