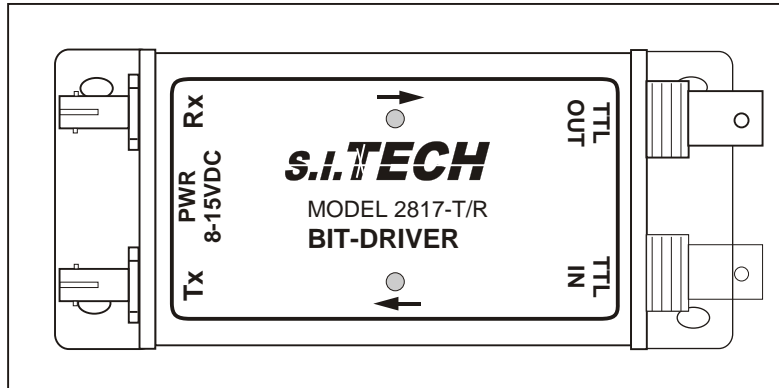


TTL to Fiber Optic Transmitter/Receiver



SYSTEM

Transmission: Up to 6500 ft. (2 Km) with suitable graded index fiber optic cable or 10 Km using single mode fiber
Typical Bit Error Rate: Better than 10^{-9}

ELECTRICAL SIGNAL INPUT/OUTPUT FOR TRANSMITTER AND RECEIVER

Format: TTL
Connector: BNC
Data Rate: Up to 20Mbps
Input Impedance: TTL levels 10 K
Output Impedance: TTL levels into 50
Input Power: 8 to 15VDC 250mA Max. Optional 5VDC@150mA

OPTICAL TRANSMITTER

LED Current: 30 microwatts (-15 dBm) into 62.5 micron fiber
Wavelength: 820 nanometers (1300 nm option)
Emitter Type: LED
Optical Connector: ST

OPTICAL RECEIVER

Wavelength: 820 nm (1300 & 1550 nm option)
Minimum Sensitivity: (BER 10^{-9}) 3 microwatt (-25 dBm) @ 820 nanometers
Maximum Sensitivity: 10 microwatts
Optical Connector: ST
Operating Temperature: 0 °C to 50 °C (optional extended temp for multimode)
Storage Temperature: -40 - 80 °C
Relative Humidity: 10 to 95% Non-Condensation
Size: 5.125" X 2.125" X 1.0" (13.00 X 5.40 X 2.54 cm)
Card Version: 2317

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



TRANSMISSION LINE INTERFACE

Operating distance is dependent upon optical fiber core diameter and the cable's optical attenuation. The table below indicates three cables that may be used at any data rate. These cables are available in connectorized assemblies to meet the exact configuration of your application.

S.I.Tech offers complete links including fiber optic cable, connectors, cable assemblies, and Bit-Drivers .

Operating Distance for Fiber Optic Cable

Fiber Size (Microns)	Attenuation (dB/Km)			Distance (Meters)			Distance (Feet)		
	850	1300	1550	Wavelength (nm)		Wavelength (nm)		Wavelength (nm)	
50	3.0	1.0	-	2000	6000	-	6600	20000	-
62.5	4.0	1.0	-	2000	6000	-	6600	20000	-
10 SM*	-	0.35	0.25	-	10000	12000	-	33000	40000

* Single mode (1300 and 1550 nm) option
 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 connection.

ORDERING INFORMATION

- Model Numbers**
- 2817 TTL to Fiber, Transmitter/Receiver, Multimode, ST Connector
 - 2817-SM TTL to Fiber, Transmitter/Receiver, Single mode, ST Connector
 - 2817-T TTL to Fiber, Transmitter, Multimode, ST Connector
 - 2817-R TTL to Fiber, Receiver, Multimode, ST Connector
 - 2817-T-SM TTL to Fiber, Transmitter, Single mode, ST Connector, 1300nm
 - 2817-R-SM TTL to Fiber, Receiver, Single mode, ST Connector, 1300nm
 - 2817-T-SM(15) TTL to Fiber, Transmitter, Single Mode 1550 nm
 - 2817-R-SM(15) TTL to Fiber, Receiver, Single Mode 1550 nm

- Notes:**
1. Power Supply #2121 (110VAC to 9 VDC) is recommended for all models-USA
 2. Optional Power Supply #2164 is for 230VAC applications
 3. Optional Power Supply #2166 for 5VDC

TYPICAL APPLICATION

