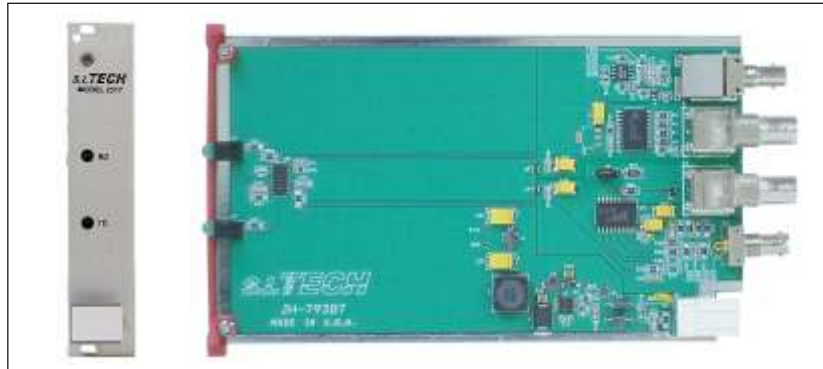


TTL to Fiber Optic Transmitter/Receiver



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 50 Mbps

Input Impedance: TTL levels 10 K or 75 *

Output Impedance: TTL levels into 50

Input Power: 10-32 V 1W Max.

Optional 5VDC 1W

*Jumper J4

Position 1: 75 (Default)

Position 3: 10 K

OPTICAL TRANSMITTER

Power: 30 microwatts (-15 dBm) into 62.5 micron fiber

Wavelength: 820 nanometers (1300nm or 1550nm 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)

Size: 3.9" X 6.8" (9.9 X 17.3cm) Eurocard

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	850	1300	1550	850	1300	1550
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.

RELATED PRODUCTS

Model Numbers

2317	TTL to Fiber, Transmitter/Receiver, Multimode, ST Connector
2317-SM	TTL to Fiber, Transmitter/Receiver, Single mode, ST Connector
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

TYPICAL APPLICATION

