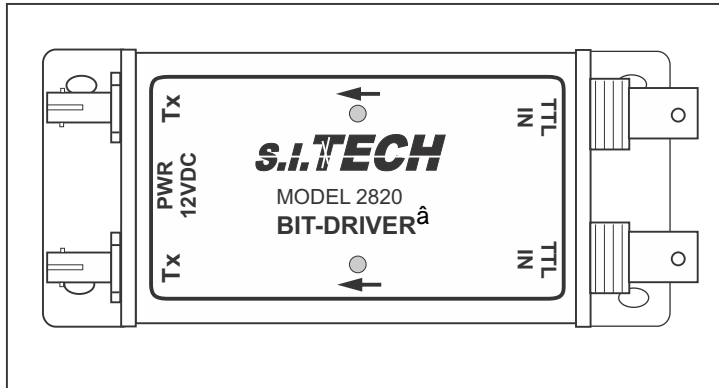


# Model 2820



## High Speed 2-Channel TTL to Fiber Optic Transmitters



### 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<sup>â</sup>.

Model 2820 consist of 2 TTL Channels 850nm or 1310nm transmitters or 850nm and 1310nm TR.

1. Data Channel.
2. IRIG (Timing) Channel

Power Consumption: 150mA (50% Duty Cycle)

### 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<sup>-9</sup>

### ELECTRICAL SIGNAL INPUT FOR TRANSMITTER

**Format:** TTL, 2 Channels

**Connector:** BNC

**Data Rate:** DC - 50 Mbps

**Input Impedance:** TTL levels 10 KW

**Input Power:** 9-32VDC 1.5W Max.  
Optional 5VDC@250mA

### 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

**Operating Temperature:** 0 °C to 50 °C (optional extended temp for multimode)

**Size:** 5.125" X 2.125" X 1.0"  
(13.00 X 5.40 X 2.54 cm)

**Weight:** 6 oz (170 Grams)

### Operating Distance for Fiber Optic Cable

Fiber Size (Microns)	Attenuation (dB/Km)			Distance (Meters)			Distance (Feet)		
	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, can also be used with WDM and 1 SM fiber.

### ORDERING INFORMATION

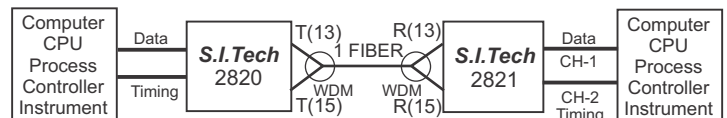
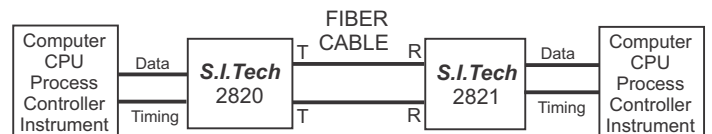
#### Model Numbers

- 2820 TTL to Fiber, 2 Transmitters, Multimode, ST Connector
- 2820-SM TTL to Fiber, 2 Transmitters, Single mode, ST Connector, 1300nm
- 2820-MM-SM TTL to Fiber, 2 Transmitters, 1 MM, 1 SM

#### Notes:

1. Power Supply #2121 (110VAC to 12 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



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

Specifications subject to change without notice.

