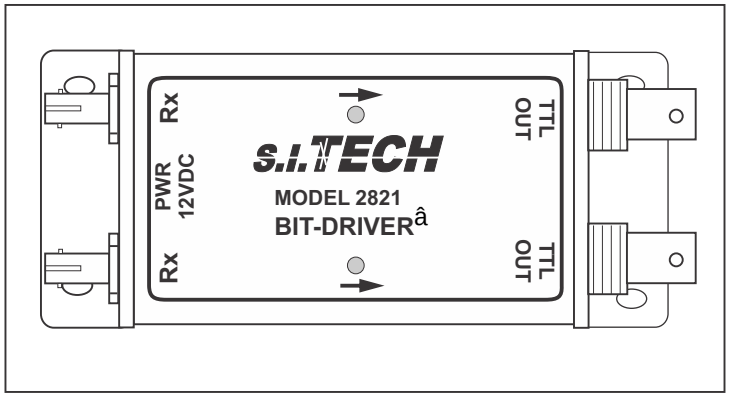
Model 2821

S.I.TECH

High Speed 2-Channel TTL to Fiber Optic Receivers



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 OUTPUT FOR RECEIVER

Format: TTL, 2 Channels

Connector: BNC

Data Rate: DC - 50 Mbps

Output Impedance: TTL levels into 50W

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

OPTICAL RECEIVER

Wavelength: 820 nm (1300 & 1550 nm option)

Minimum Sensitivity: (BER £ 10^{-9}) 3 microwatt (-25dBm) @820 nanometers

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)

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.

Model 2821 consist of 2 TTL Channels 850nm or 1310nm Receivers or 850nm and 1310 receiver.

1. Data Channel
2. IRIG Channel

Operating Distance for Fiber Optic Cable

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

Power Consumption

50% Duty Cycle	No TTL Load	50WTTL Load
2821	150 mA	220 mA

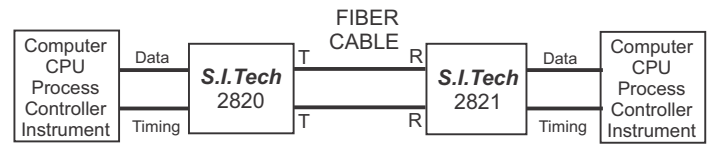
ORDERING INFORMATION

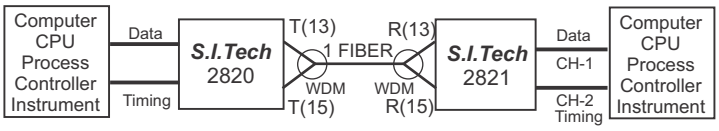
Model Numbers

2821	TTL to Fiber, 2 Receivers, Multimode, ST Connector
2821-SM	TTL to Fiber, 2 Receivers, Single mode, ST Connector, 1300nm
2821-MM-SM	TTL to Fiber, 2 Receivers, 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





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