

Model 2816-8R-T & 2816-8R-R

S.I.TECH

High Speed TTL to Fiber Optic Transmitter/Receiver - 8 Channel



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.

S.I.Tech #2816-8R-T & R can be used as 8 TTL channels with 8 fibers or using WDM, 4 fibers can be used.

SYSTEM

Transmission: Up to 6500 ft. (2 Km) with suitable graded index fiber optic cable or 10 Km using single mode fiber on each channel

Typical Bit Error Rate: Better than 10^{-9}

ELECTRICAL SIGNAL INPUT/OUTPUT FOR TRANSMITTER AND RECEIVER

Format: TTL - 8 Channel

Connector: BNC

Data Rate: 100 Kbps - 50 Mbps

Input Impedance: TTL levels 10 K

Output Impedance: TTL levels into 50

Input Power: 110/230VAC, 12W

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

Optical Connector: ST

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

Size: 17" W X 3.50" H X 7.5" D
(43.2 X 8.6 X 19.0 cm)

Weight: 4.5 lbs. (2.0KG)

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

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.

WDMs: S.I.Tech #8513 for Multimode. S.I.Tech #1315 for Single mode.

Power Consumption/Channel

50% Duty Cycle	No TTL Load	50 TTL Load
2816 T	60 mA	X
2816 R	50 mA	110 mA

ORDERING INFORMATION - RELATED PRODUCTS

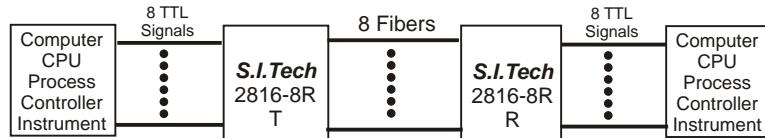
Model Numbers

2816	TTL to Fiber, Transmitter/Receiver, Multimode, ST Connector
2816-SM	TTL to Fiber, Transmitter/Receiver, Single mode, ST Connector
2816-T	TTL to Fiber, Transmitter, Multimode, ST Connector
2816-R	TTL to Fiber, Receiver, Multimode, ST Connector
2816-T-SM	TTL to Fiber, Transmitter, Single mode, ST Connector, 1300nm
2816-R-SM	TTL to Fiber, Receiver, Single mode, ST Connector, 1300nm
2816-T-SM(15)	TTL to Fiber, Transmitter, Single Mode 1550 nm
2816-R-SM(15)	TTL to Fiber, Receiver, Single Mode 1550 nm
2820	TTL to Fiber, 2CH transmitter
2821	TTL to Fiber, 2CH Receiver
2816-16R-T	16 Ch, TTL to Fiber TR, MM
2816-16R-R	16 Ch, TTL to Fiber Rec, MM

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



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

Specifications subject to change without notice.

