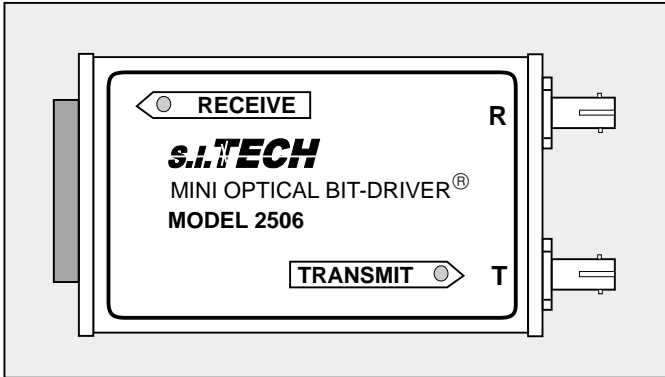


# Optical Asynchronous Mini Bit-Driver<sup>®</sup>



**Features:**

- 50 bps to 56 Kbps asynchronous operation on fiber optic cable, simplex or full duplex operation with handshaking
- Powered by wall transformer (S.I.Tech #2121) or through the DB25 connector
- 2 full duplex control signals
- 6600 ft. (2.0Km) distance capability
- 0 °C to + 50 °C operating range
- ST connector receptacle (SMA option)
- LED indicators for transmit and receive data
- Male or female RS-232C (V.24) connectors

**Operation Mode:** Asynchronous, simplex or full duplex

**Input/Output Interface:** RS-232-C, asynchronous with 2 control lines, connects directly to Terminal (RS-232 cable not required)

**Transmission Line Interface:** ST connector is standard for interfacing with fiber optic duplex cable (SMA option)

**Transmission Distance:** 6600 ft. (2.0 Km)

**Optical Power into a 62.5 Micron**

**Core Optical Fiber:** 10 microwatts, 15 dB power budget @ 820 nanometers (1300nm option)

**Receiver Sensitivity:** 220 nanowatts at less than 10<sup>-9</sup> bit error rate

**Operating Temperature:** 0 °C to 50 °C

**Metal Enclosure:** 1.75 x 3 x 0.625 in (4.5 x 7.5 x 1.6 cm)  
Panel or DIN rail mounting option

**Weight:** 0.25 lb (100 grams)

**Input Power:** Host supplied or external power supply (S.I.Tech #2121 - 110 VAC to 12 VDC)

**230V Version:** Use S.I.Tech 2122 power supply

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

*Specifications subject to change without notice.*



**RS - 232 CONNECTOR PINS UTILIZED BY 2506 MINI BIT - DRIVER (MALE OR FEMALE)**

Pin No.	EIA DESIG.	Description	Symbol	DTE	DCE
1	AA	Protective Ground	Chassis Ground	↔	↔
2	BA	Transmitted Data	TXD	→	→
3	BB	Received Data	RXD	←	←
4	CA	Request to Send	RTS	→	→
5	CB	Clear to Send	CTS	←	←
6	CC	Data Set Ready	DSR	←	←
7	AB	Signal Ground	Sig. Gnd.	↔	↔
9		Positive 12 VDC Input	+ 12V	→	→
20	CD	Data Terminal Ready	DTR	→	→

**OPERATING DISTANCE FOR FIBER OPTIC CABLE**

Fiber Size (Microns)	Attenuation dB/Km	Distance* Meters	Distance* Feet
50	3.0	2000	6600
62.5	4.0	2000	6600
100	5.0	2000	6600
10 SM	1.0	5000	16000

\* High power option available

SM - Single mode (1300nm) 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.

