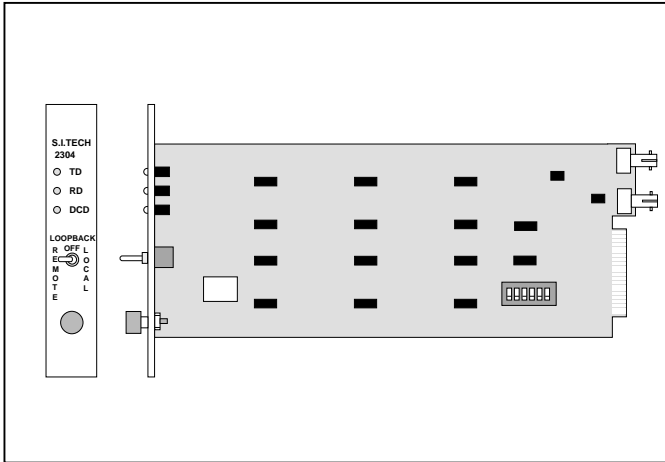


# Optical Synchronous Bit-Driver<sup>®</sup> Point to Point



**Features:**

- 2.4, 4.8, 9.6, 19.2 Kbps, and 56 Kbps with external clock
- Synchronous, simplex, or full duplex operation
- 6600 ft. (2Km) distance capability
- 0 °C to + 50 °C operating range
- ST connector receptacle (SMA option)
- Designed to work with S.I.Tech 2004 RS232 Bit-Driver
- Requires 3000B rack, 3500 mother board, and 4000 power supply

**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 **	7000	23000

\* High power option available  
 \*\* Single Mode 1300 nm option

**RS - 232 CONNECTOR PINS UTILIZED BY 2304 BIT DRIVER<sup>®</sup>**

Pin No	EIA Designation	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.	←	←
8	CF	Data Carrier Detect	DCD	←	←
15	DB	Serial Clock Transmit	SCT	←	←
17	DD	Serial Clock Receive	SCR	←	←
20	CA	Data Terminal Ready	DTR	→	→
24	DA	External Clock	EXC	→	→

\*\* DSR is true when power is on. Unlisted pins not utilized. RTS/CTS delay time is zero. Transmitter enabling is controlled by DTR.

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

**Input/Output Interface:** RS-232, DB25 Female, Synchronous 2.4, 4.8, 9.6, and 19.2 Kbps. Ext Clock 56 Kbps

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

**Transmission Distance:** 6600 ft. (2 km)

**Optical Power into a 50 Micron**

**Core Optical Fiber:** 5 microwatts, 10 dB power budget @ 880 nanometers (High power option)

**Receiver Sensitivity:** 250 nanowatts at less than 10<sup>-9</sup> bit error rate

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

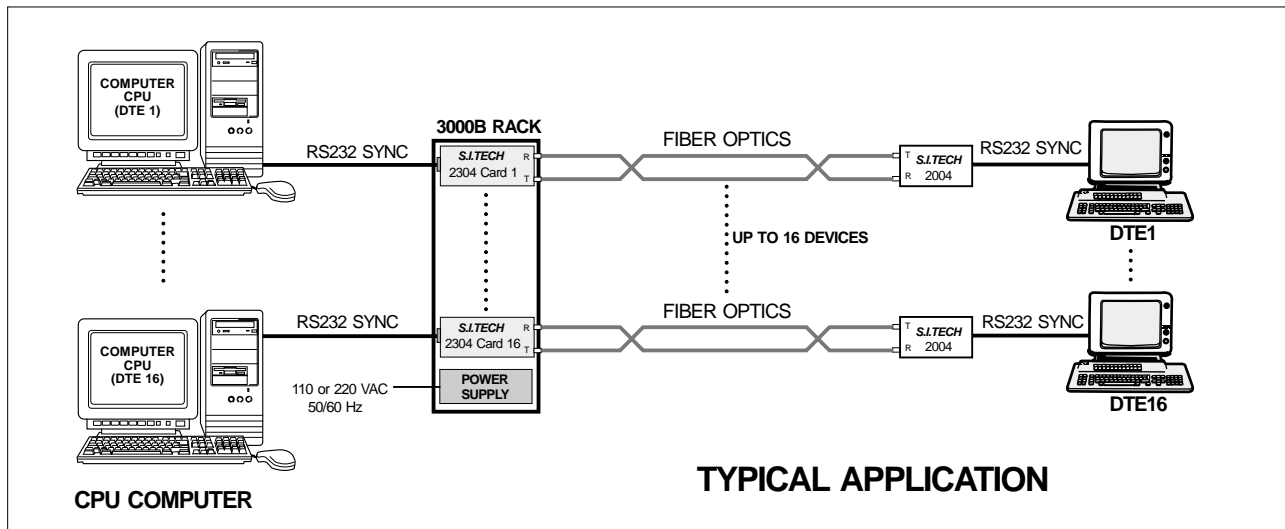
**Enclosure:** 19" rack holds 16 cards

**Card Size:** American Standard Card

**Weight:** 0.5 lb (200 grams)

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

*Specifications subject to change without notice.*



**TYPICAL APPLICATION**