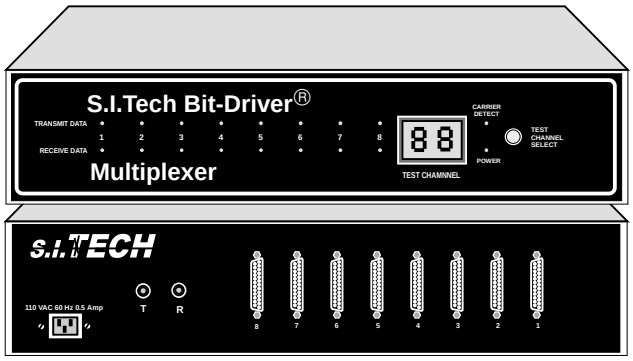
Model 2006

S.I.TECH

Fiber Optic Bit - Driver ® Multiplexer



S.I Tech Model 2006 Bit-Driver® multiplexer is ideal for in-house data transmission where you have clustered terminal situations. It delivers eight full duplex ports capable of moving up to 19.2 Kbps in either synchronous or asynchronous modes, without using flow control or buffering techniques, resulting in absolute minimum throughput delay. Aggregate speed is 160 Kbps. Each port on the multiplexer is fully independent, allowing mode (synchronous or asynchronous) mixing. There are five switch-selectable, synchronous data rates per channel.

Model 2006 is an eight channel time division multiplexer, providing eight Bit-Driver® links using one optical cable interface. Fiber optic cable offers complete immunity to EMI/RFI interference problems for secure data transmission in noisy environments.

Status indicators show the activity of each channel and the integrity of the link. If a problem develops, you can select a digital loopback for any channel at both ends of the link without interrupting the data flow on the other seven channels. If transmission line problems are suspected, an analog loopback can be selected and the cable will be included in the test loop. Operating distance is 6600 feet (2 Km), 5 Km option.

Operation Mode: Asynchronous/Synchronous simplex or full duplex.
Input/Output Interface: RS-232-C, Type D at 0 to 19.2 kbps.
Phase Distortion: Less than 12.5%
RTS/CTS Delay Time: 0
Number of Channels: 8
Optical Power into a 50 Micron core Optical Fiber:
Transmission Wavelength: 10 microwatts
Receiver Sensitivity: 820 nanometers (1300 nm option) 1 microwatts at less than 10^{-9} bit error rate
Optical Connector: ST or SMA metal receptacle
Operating Temperature: 0 ºC to 50 ºC
Input Power: 105 to 130 VAC 60 Hz, 50 W Power transformer secondary fused and operates from 50 to 520 Hz Detachable power supply cord
Metal Enclosure: 17.25" X 10" X 4.125" (43.8 X 25.4 X 10.5 cm) - rack mounting with ears
Weight: 12 lbs. (5.45 Kg)
220 Volt Version: Model 2006V

National stock No. 6008-01-365-1380 JZ

UL & CSA listed. Meets FCC requirements of Class A, Part 15 Computing Devices Standard.
Specifications subject to change without notice.

Operating Distance for Fiber Optic Cable

Fiber Size (Microns)	Attenuation dB/km	Distance* Meters	Distance* Feet
100	5.0	2000	6600
62.5	4.0	2000	6600
50	3.0	2000	6600
10**	1.0	7000	23000

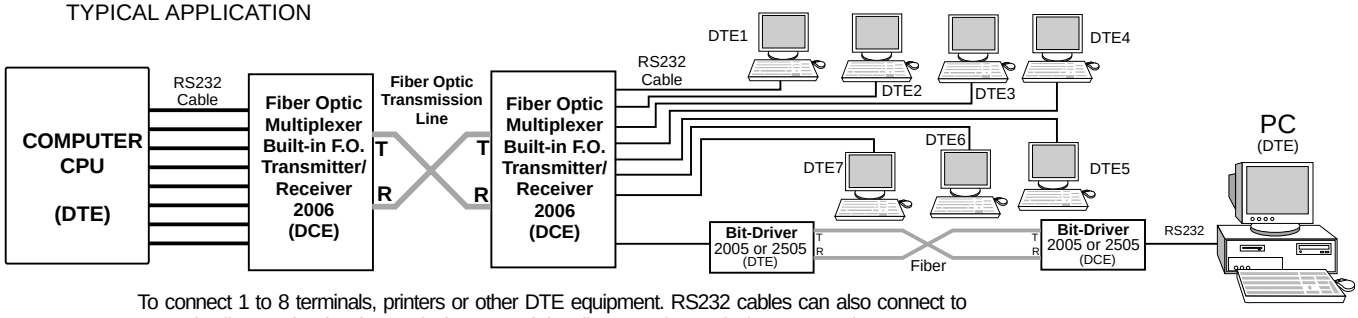
* Short length of some fiber types can overload the receiver, see installation instructions.
** Single Mode Optional

RS - 232 CONNECTOR PINS UTILIZED BY 2006 MULTIPLEXER

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	Transmission Signal Element Timing		
17**	DD	Receiver Signal Element Timing		

* Optional signal not required for normal operation.
** Pins 15 and 17 are needed for synchronous terminals only.

TYPICAL APPLICATION



To connect 1 to 8 terminals, printers or other DTE equipment. RS232 cables can also connect to S.I.Tech Fiber Optic Bit-Driver to further extend the distance of a particular DTE equipment.

For application engineering assistance: 630-761-3640 FAX: 630-761-3644 S.I.Tech, P.O.Box 609, Geneva, Illinois 60134 U.S.A. Web site: http://www.sitech-bitdriver.com.