

# Optical Asynchronous/Synchronous Mini Bit - Driver $\odot$



**Features:**

- Full duplex synchronous DC to 9.6 Kbps, asynchronous DC to 115 Kbps with control signals
- 6600 ft. (2 Km) distance capability with multimode
- -40<sup>o</sup> C to 80<sup>o</sup> C operating range (MM) (-20 to 60<sup>o</sup> C for SM)
- ST connector receptacle
- Switch selectable speeds in sync operation
- Designed to meet TEMPEST specification
- Single mode fiber option

- Operation Mode:** Asynchronous/synchronous, full duplex with control signals
- Input/Output Interface:** RS-232-C, Type D, connects to terminal (RS232 cable not required)
- Transmission Line Interface:** ST connector is standard for interface with fiber optic duplex cable
- Optical Power into a 50 Micron Core Optical Fiber:** 10 microwatt, 10 dB power budget @ 850 nanometers (1310 Option)
- Receiver Sensitivity:** 1 Microwatt at less than 10<sup>-9</sup> bit error rate
- Operating Temperature:** -40<sup>o</sup> C to 80<sup>o</sup> C(MM)  
-20<sup>o</sup> C to 60<sup>o</sup> C(SM)
- Input Power:** External with power supply (S.I.Tech #2103A 110/230 VAC to 12 VDC)
- Metal Enclosure:** 2.0" X 4" X 0.87"  
(5.0 X 10.2 X 2.2 cm)
- Weight:** 0.37 lb.(190 grams)

*Meets FCC requirements of Class A, Part 15 Computing Devices Standard.  
Specifications subject to change without notice.*

**RS - 232 CONNECTOR PINS UTILIZED BY 3503 BIT DRIVER  $\odot$  (MALE)**

Pin No	Description	Symbol	DTE DCE
1	Ground	Chassis Ground	↔
2	Transmitted Data	TXD	→
3	Received Data	RXD	←
4	Request to Send	RTS	→
5	Clear to Send	CTS	←
6	Data Set Ready	DSR	←
7	Signal Ground	Sig. Gnd.	↔
8	Data Carrier Detect	DCD	←
17	Receive Clock	Rx Clock	→
20	Data Terminal Ready	DTR	→
21	Signal Quality Detector	SQD	
24	Transmit Clock	TXQ	

**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
9SM*	0.3	10000	33000

\* High power and single mode option available

