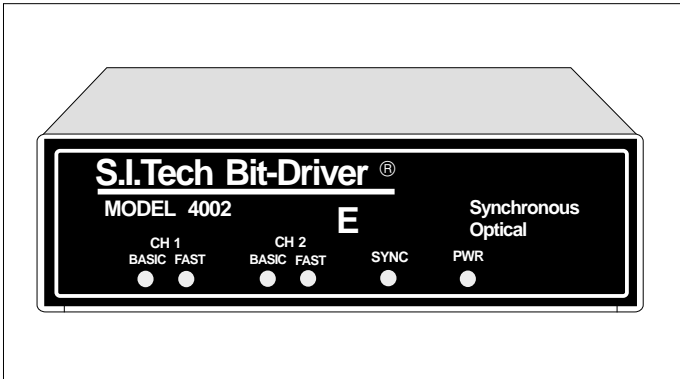


Model 4002



Twinax to Fiber Optic Multiplexer IBM System 3X, AS400 & AS/400E



The S.I.Tech 4002 Multiplexer Bit-Driver[®] is designed to work with IBM 3X, AS/400 and AS/400E system using twinax cable. Model 4002 Multiplexer is a 2 channel twinax to fiber optic transmitter/receiver full duplex multiplexer product implementing IBM BASIC or FAST protocol. Supports TCP/IP over Twinax.

This fiber optic Bit-Driver product eliminates many disadvantages of twinax, especially EM/RFI, ground loops (electrical isolation with fiber), high attenuation (high signal loss), limiting distance between nodes of system, lightning damage outdoors between buildings

S.I.Tech Model 4002 is a stand alone product allowing easy change from twinax or TP to fiber. Simply disconnect twinax or TP and connect to model 4002 input/output port. Model 4002 comes with power supply and status indicators showing power, data link (sync), basic or fast protocol for each channel.

- Operation Mode:** Synchronous, half/full duplex.
1 or 2 Mbps Bi-phase data.
- Input/Output Interface:** 100 ohm twinax bulkhead jack or RJ45 (TP). IBM protocol. BASIC or FAST.
- Number of Channels:** 2
- Transmission Line Interface:** 2 ST connector fiber optic receptacles (SMA - Option)
- Data Link Speed:** 8 Mbps
- Transmission Distance*:** 2 km - 6600 ft, (5 km option)
- Transmitter Output Power:** 30 microwatts into 62.5 micron fiber.
- System Wavelength:** 820 nanometers (1300nm option)
- Receiver Sensitivity:** 3 microwatts at less than 10⁻⁹ bit error rate
- Operating Temperature:** 0^o C to 50^o C
- Metal Enclosure:** 7.5" X 7" X 3" (19 X17.8X7.6 cm)
- Weight:** 4 lbs. (1.8 kg)
- Input Power:** 110/230 VAC, 50/60 Hz, 20 W detachable power cord, power supply meets UL, CSA, VDE, IEC, FCC requirement.

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
10**	1.0	5000	16500

* High power option available

** Single Mode (While fiber can allow long distance transmission, check IBM timing restrictions)

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 the cable imprint. On the other end, reverse the connections.

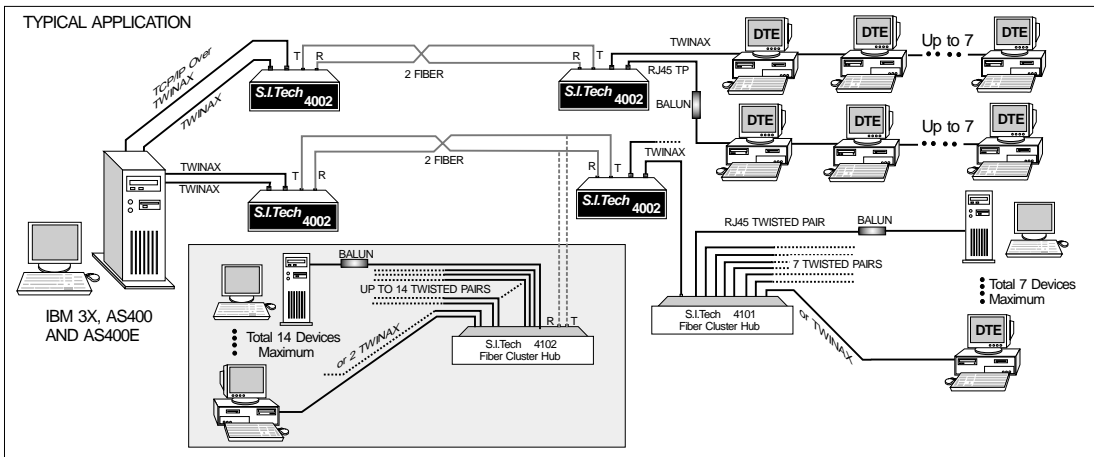
- IBM specifications: Twinax 5000 ft. (1524 m) max; Local ports - 7 devices max; Remote ports - 4 devices max; 5751 Cluster Controller; 5251 remote terminal controller, 5294 and 5394 controllers.
- If other than twinax cable is used, matching impedance transformers (Balun) are needed.
- Some fiber types in short distance applications may overload the receiver.
- S.I.Tech 4002 Multiplexer is a unique design allowing support of 2 ports from same controller card or one port each from 2 different controllers.

Related products: 4001, 4004. Hubs: 4101 or 4102.

UL & CSA listed. Meets FCC requirements of Class A, Part 15 Computing Devices Standard.

Specifications subject to change without notice.

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OPTIONS

Model No.	Options XX.XXX.XX
1. 4002	TW. ST. MM
2. 4002	TP . ST. MM
3. 4002	TW. ST. SM
4. 4002	TP . ST. SM
5. 4002	TW.SMA.MM
6. 4002	TP. SMA. MM
7. 4002	TW. SC. SM
8. 4002	TP . SC. SM
9. 4002V	TP. TW. ST. MM

TW - Twinax
 TP - Twisted Pair, RJ - 45
 ST - F. O. Connectors
 SMA - F. O. Connectors
 SC - F. O. Connectors
 MM - Multimode Fiber
 SM - Single Mode Fiber
 V - 230 VAC