## **Model 2853**



## Coax to Fiber Optic Modem



The S.I.Tech 2853 Bit-Driver<sup>®</sup> is designed to work with coaxial cable "Arcnet". Model 2853 is a coax to fiber optic transmitter/receiver full duplex product implementing "Arcnet" networking scheme. The normal operating data rate is 2.5 Mbps.

This fiber optic Bit-Driver product eliminates many disadvantages of coaxial cable, especially EMI/RFI, high attenuation (high signal loss), limiting distance between nodes of Arcnet (2000 feet coax), ground loops (electrical isolation with fiber), weight, and potential lightning damage outdoors between buildings.

S.I.Tech Model 2853 is a stand alone product allowing easy change from coax to fiber: Simply disconnect the BNC connector and plug into the input/output port.

	Synchronous, simplex or full duplex, 2.5 Mbps		
	93 ohm coaxial cable BNC bulkhead jack		
Transmission Line Interface:	2 ST connector fiber optic receptacles(SMA option)		
Transmission Distance:	6600 ft. (2.0 Km) (5 Km option)		
	30 microwatts into 50 micron fiber		
-	820 nanometers (1300 nm option)		
Receiver Wavelength:	820 nanometers (1300 nm option)		
Minimum Sensitivity:	3 microwatts @ 820 nanometers		
Bit Error Rate:	10 <sup>-9</sup>		
Operating Temperature:	0 <sup>o</sup> C to 50 <sup>o</sup> C		
Metal Enclosure:	7.5" X 7" X 3"		
	(19 X 17.8 X 7.6 cm)		
	3 lbs. (1.36Kg)		
Input Power:	110 VAC, 50/60 Hz		
230V Version:	2853V		
Rack Mount Version:	2353 (3000 rack)		

## OPERATING DISTANCE FOR FIBER OPTIC CABLE

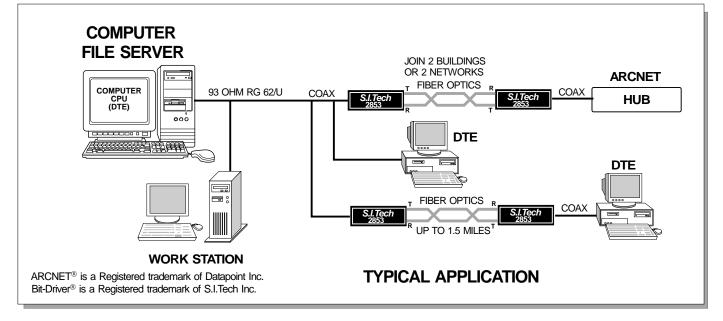
Fiber Size (Microns)	Attenuation dB/Km	Distance Meters	Distance Feet
50	3.0	2000	6600
62.5	4.0	2000	6600
100	5.0	2000	6600
10*	1.0	7000	23000

\*Single mode (1300nm) option (Check Network 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 cable imprint. On the other end, reverse the connection.

Note: Some fiber types in short distance applications may overload the receiver.

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



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.