

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

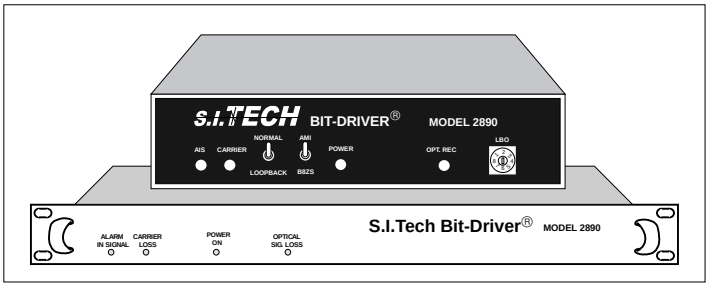
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

Model 2890 (T1) / 2891 (E1)

S.I.TECH

T1/E1 to Fiber Bit - Driver ®



Operation Mode: Synchronous, half/full duplex
1.544 Mbps, T1
2.048 Mbps, E1

Input/Output Interface: T1 - RJ48C 100Ω Twisted Pair
E1 - BNC 75Ω Coax
E1 - RJ48C 120Ω Twisted Pair

Transmission Line Interface: 2 ST fiber optic receptacles

Connector Options: ST, SC, and FC

Transmission Distance: See distance chart

Distance Options: 5 km, 10 km, or 20 km

Transmitter Output Power: 30 Microwatts into 50 Micron fiber (820nm & 1300nm options)

Receiver Wavelength: 820 nm or 1300 nm

Minimum Sensitivity: 3 Microwatts @ 820 nanometers

Bit Error Rate: 10^{-9}

Operating Temperature: 0 °C to 50 °C

Mean Time Between Failure: MTBF @ 25 °C = 800,000 Hours
MTBF @ 50 °C = 300,000 Hours
[Bellcore test method used]

Metal Enclosure: 7.25" X 7" X 1.75"
(18.4 X 17.8 X 4.4 cm)

1U Rack Mounting Option: 17.0"W X 1.7"H X 7.5"D
(43.2 X 4.3 X 19.0 cm)

Weight: 3 lb.(1.36 kg) / Rack 6 lb.(2.72kg)

Input Power: 3 Watts Max

Power Options: 2890/2891 (110 VAC, 60 Hz)
2890V/2891V (230 VAC)
2890-48/2891-48 (-48 VDC)

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

Features:

- T1 AMI or B8ZS, E1 AMI or HDB3
- Status indicators and alarms for ease of use and maintenance
- Twisted pair (T1 and E1) or BNC (E1 only) electrical interface options
- AMI or zero suppression line codes
- Multimode or single mode fiber interface options
- Toggle switches for most control settings and rotary switches for T1 line build out settings
- Up to 10 Km at low cost

The S.I.Tech 2890/2891 Bit-Driver® is designed to work with T1 or E1 systems. Model 2890/2891 is a T1 or E1 to fiber optic transmitter/receiver full duplex product implementing T1 or E1 protocol. Nominal operating data rate is 1.544 Mbps ±32PPM. (E1 - 2.048 Mbps ±50PPM)

This fiber optic Bit-Driver® product eliminates many disadvantages of metallic T1 and E1 signals, especially EMI/RFI, ground loops (electrical isolation with fiber), high attenuation (high signal loss), limiting distance between nodes of system, and potential lightning damage outdoors between buildings.

S.I.Tech Model 2890/2891 is a stand alone or rack mount product allowing easy change from T1 or E1 to fiber. Simply connect T1 or E1 cable to model 2890/2891 input/output port. Model 2890/2891 comes with power supply and status indicators.

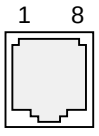
OPERATING DISTANCE FOR FIBER OPTIC CABLE

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

* Single mode (1300nm) option
(High power option available for longer distances)

FEMALE RJ48 I/O CONNECTIONS

Pin #	Name	Function
1	R	T1/E1 receive ring
2	T	T1/E1 receive tip
4	R1	T1/E1 transmit ring
5	T1	T1/E1 transmit tip
7		Transmit drain wire
8		Receive drain wire



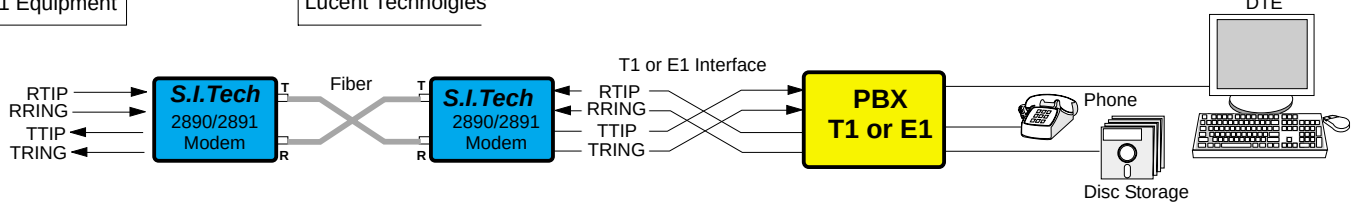
RJ48C

Tested to work with:
PBXs
Switches
Key Systems
& Other T1 Equipment

- Made/Used by -

NEC, Samsung, Panasonic, Verizon, AT&T, Tadiran, ECI Telecom, Lucent Technolgies

TYPICAL APPLICATION



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.
©2007 S.I. Tech, Inc.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP