

## Specifications:

Operation Mode: Synchronous, halffull duplex 44.736 Mbps , T 3 34.368 Mbps , E3 (G703) 51.84 Mbps, STS-1 (OC-1)

Input/Output Interface:
T3, 75 ohm Coax (BNC)
E3, 75 ohm Coax (BNC)
Transmission Line Interface: 2 ST fiber optic receptacles
Connector Options: ST, SC, and FC
Transmission Distance: 6600 ft . (2km)
Distance Options: $5 \mathrm{~km}, 10 \mathrm{~km}$, and single-mode
Transmitter Output Power: 30 Microwatts into 50 Micron fiber (SM option)
System Wavelength: 820 nm or 1300 nm
Minimum Sensitivity: 3 Microwatts @ 820 nanometers Bit Error Rate: $10^{-9}$
Operating Temperature: $0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$
1U Rack: $17.0^{\prime \prime} \mathrm{W} \times 1.7^{\prime \prime} \mathrm{H} \times 7.5 \mathrm{D}$
(43.2 X $4.3 \times 19.0 \mathrm{CM}$ )

Weight: Rack $6 \mathrm{lb} .(2.72 \mathrm{~kg})$
Input Power: $110 \mathrm{VAC}, 60 \mathrm{~Hz}, 10 \mathrm{~W}$
Power Options: 2893/2894V(230 VAC) 2893/2894 (-48 VDC)

## Features:

- T3, E3, or STS-1 (OC-1)
- Status indicators \& alarms for ease of use and maintenance
- Multimode or single mode fiber option
- Up to 25 km at low cost
- Optical link failure alarm built in
S.I.Tech 2893/2894/2895 Bit-Driver is designed to work with T3, E3, or STS-1 systems. Model 2893/2894/2895 is a T3, E3, or STS-1 to fiber optic transmitter/receiver full duplex product implementing T3, E3, or STS-1 protocol. Normal operating data rate for T3 is 44.736 Mbps.
(E3-34.368 Mbps, STS1-51.84 Mbps)
This fiber optic Bit-Driver product eliminates many disadvantages of T3, E3, or STS-1 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 2893/2894/2895 is a rack mounted product allowing easy change from T3, E3, or STS-1 to fiber. Simply disconnect T3, E3, or STS-1 cable and connect to model 2893/2894/2895 input/output port. Model 2893/2894/2895 comes with power supply and status indicators.

| Model Numbers |  |
| :---: | :---: |
| 2893(T-3), 2894(E-3), 2895(STS-1 or OC-1) units available with several options. |  |
| XXXX - R - ST | Rack mounted, 110 VAC, ST |
| XXXX-2R-ST | 2 Channel Rack Mounted, 110 VAC, ST |
| XXXX - R - SM - SC | Rack mounted, Single mode, SC, 110 VAC |
| XXXX - V | 220 Volt AC Power unit |
| XXXX - 48 | 48 VDC Power unit |
| XXXX - R - SM - HP - SC | Rack mounted, Single mode, High power, 110 VAC, SC |
| XXXX/850/1300 | Unit for use with WDM |
| S.I.Tech supplies 2893/2 customer specific applica | /2895 models with many different options to match ns. Specify correct part number for your application. |

Operating Distance for Fiber Optic Cable

| Fiber Size <br> (Microns) | Attenuation <br> $\mathrm{dB} / \mathrm{km}$ | Distance $^{*}$ <br> Meters | Distance* <br> Feet |
| :---: | :---: | :---: | :---: |
| 50 | 3.0 | 2000 | 6600 |
| 62.5 | 4.0 | 2000 | 6600 |
| 10 SM | 1.0 | 10000 | 33000 |
| SM-HP(15) | 0.2 | 70 Km |  |

* Single mode (1300nm or 1550 nm ) option
(High power option available for long distances)


## TYPICAL APPLICATION



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

Specifications subject to change without notice.

