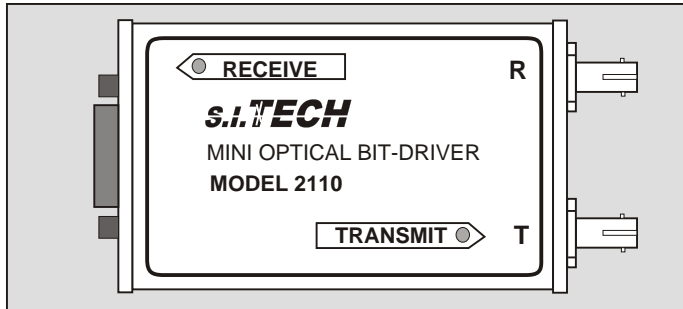


Optical Asynchronous Mini Bit-Driver Point to Point



Operation Mode: Asynchronous, bi-directional, half duplex

Input/Output Interface: RS485, 9 pin type D, asynchronous at 0 to 56 Kbps** connects directly to terminal (RS485 cable not required)

Transmission Line Interface: ST connector is standard for interfacing with fiber optic cable (SMA option)

Transmission Distance: See distance chart

Optical Power into a 50 Micron

Core Optical Fiber: 0.5 microwatt, 10 dB power budget* @ 880 nanometers

Receiver Sensitivity: 50 nanowatts at less than 10⁻⁹ bit error rate

Operating Temperature: 0 °C to 50 °C

Metal Enclosure: 1.75 x 3 x 0.625 in (4.5 x 7.5 x 1.6 cm)
Panel or DIN rail mounting option

Weight: 0.25 lb (100 grams)

Input Power: External with power supply (S.I. Tech #2121 - 110VAC to 12 Volt DC)

230V Version: Use S.I.Tech 2122 power supply

** Data rate must be set at factory

Meets FCC requirements of Class A, Part 15 Computing Devices Standard.

Specifications subject to change without notice.



ORDERING INFORMATION

Model Numbers

| | |
|-------------|---|
| 2110 | RS485 to Fiber, Multimode, ST Connector, N2 Bus |
| 2110BAC | RS485 to Fiber, Multimode, ST Connector, Bacnet |
| 2610 | RS485 to Fiber, Multimode, ST, High Temp. |
| 2110-SM | RS485 to Fiber, Single Mode, ST |
| 2110-SMA | RS485 to Fiber, Multimode, SMA Connector |
| 2110-660 | RS485 to Plastic Fiber, SMA Connector |
| 2110-L | RS485 to Fiber, Multimode, High Power (5Km), ST |
| 2110-DIN | RS485 to Fiber, Multimode, ST, Dinrail Unit |
| 2110-SM-DIN | RS485 to Fiber, Single mode, ST, Dinrail Unit |

Notes:

1. Power Supply # 2121 is required for all models (110VAC to 12 VDC).
2. Power Supply #2122 is for 230VAC applications
3. For 2110 rack mounted, use version 2310 (or 2345) Card with 3000 Rack, 4000 Power Supply, and 3520 (or 3500) Motherboard.

Features:

- 0 to 56 Kbps asynchronous, RS-485 half duplex operation
- 6600 ft. (2Km) maximum distance capability
- 0 °C to + 50 °C operating range
- ST connector receptacle (SMA option)
- Designed to work with Johnson Controls System - N2 Bus and Bacnet (2110BAC)
- For card version use 2310 (N2 Bus) or 2345 (point to point)
- Cable assembly use 7110 (2110 to N2 Bus)
- Data speed set at the factory

RS - 485 9 PIN CONNECTOR - FEMALE PINS UTILIZED BY 2110 MINI BIT - DRIVER

| Pin No. | Description | Symbol |
|---------|-----------------|--------|
| 1 | Signal Ground | SG |
| 2 | NC | |
| 3 | Data (+) | D + |
| 5 | Signal Ground | SG |
| 6 | NC | |
| 7 | Termination (+) | T + |
| 8 | Termination (-) | T - |
| 9 | Data (-) | D - |

OPERATING DISTANCE FOR FIBER OPTIC CABLE

| Fiber Size (Microns) | Attenuation dB/Km | Distance Meters* | Distance Feet* |
|----------------------|-------------------|------------------|----------------|
| 1000 | 200 | 100 | 330 |
| 50 | 3.0 | 2000 | 6600 |
| 62.5 | 4.0 | 2000 | 6600 |
| 100 | 5.0 | 2000 | 6600 |
| 8 SM** | 1.0 | 7000 | 23000 |

* High power option available ** Single mode option
1000 Micron is plastic fiber (uses SMA connectors) option

Termination Resistors provided in Bit-Driver

