



### Model MN-1 Mini-Node Communication Signal Converter

**Bulletin E-90-MN-1** 

## **Specifications and Operating Instructions**



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**GREEN LED** 

The Model MN-1 Mini-Node Communication Signal Converter is a low cost device that converts half duplex RS 485 serial communications signals into a signal that can be read by any computer with a USB port. The integral USB connector and RJ-45 connector reduces set up time by eliminating extra wiring. The Model MN-1 is powered via the USB connection which eliminates the need for an external power source. The compact size is great for field installation, control panels, and lab testing.

#### **SPECIFICATIONS**

Power Requirements: No external power required.

Power Consumption: 0.4 W. Isolated Voltage: 3000 VDC. Input Impedance: 96 k . USB Connector: A-Type (plug). RS-485 Connector: RJ-45.

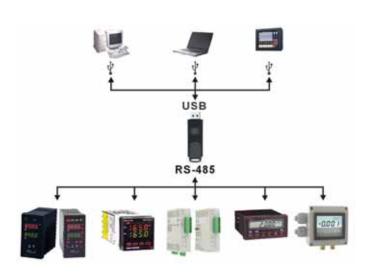
YELLOW LED

Baud Rate: 75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400,

57600, and 115200 bps.

Compatibility: Full compliance with USB V.2.0 specification.

#### **APPLICATION**



#### **RJ-45 PIN**



PIN	Signal Name
1	Reserved
2	Reserved
3	Reserved
4	SG+ (Red)
5	SG- (Green)
6	Reserved
7	Reserved
8	Reserved

The "SG+" connects to the "+" and the "SG-" connects to the "-" of the RS-485 Device.

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#### **LED MODES**

- 1. Green LED indicates unit is powered.
- 2. Yellow LED to indicate that data is being transferred.

#### **USB DRIVER INSTALLATION**

NOTE: Do NOT connect MN-1 to PC before extracting the driver file.

- Insert the factory supplied CD into the CD drive of your computer. If the CD does not start automatically, click "Start", "Run" & type D:/Drivers.exe then click "OK".
- 2. Follow the on screen instructions to prepare for installation of the driver.
- A folder marked SiLabs should now appear in the PC's C drive.
- 4. Connect the MN-1 to PC.
- The PC should automatically recognize that new hardware has been found. If not, add hardware can be found un the control panel.
- Follow on screen instructions for assigning USB driver to the MN-1.
- Repeat steps 5 and 6 for assigning RS-485 Driver to the MN-1.
- 8. Open the system folder in the control panel.
- 9. Click on hardware tab.
- 10. Open the device manager.
- 11. Double click on ports.
- 12. Verify that USB to UART Bridge Controller appears.
- 13. The Driver installation is complete.

#### **MAINTENANCE**

Upon final installation of the Model MN-1 Mini-Node USB to RS 485 Converter, no routine maintenance is required. A periodic check of system calibration is recommended. The Model MN-1 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

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