Thank You

Thanks for purchasing a RST-5003 control module from us! We appreciate your business and your trust. Please take a moment to familiarize yourself with the product and this manual before installation. If you have any questions, at any time, don't hesitate to call us at 402-434-9102.

> 🗒 NOTE: Scan the QR code to the below to visit www.binmaster.com/literature.
>
>
>
> BinMaster Support Literature

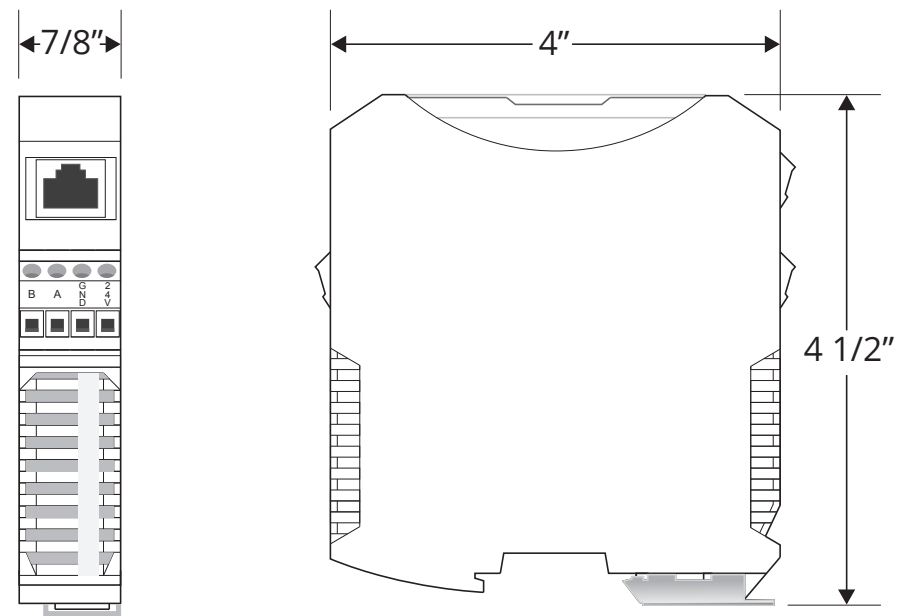## Table of Contents

RST-5003 Control Module Installation Guide

Web Enabled Series

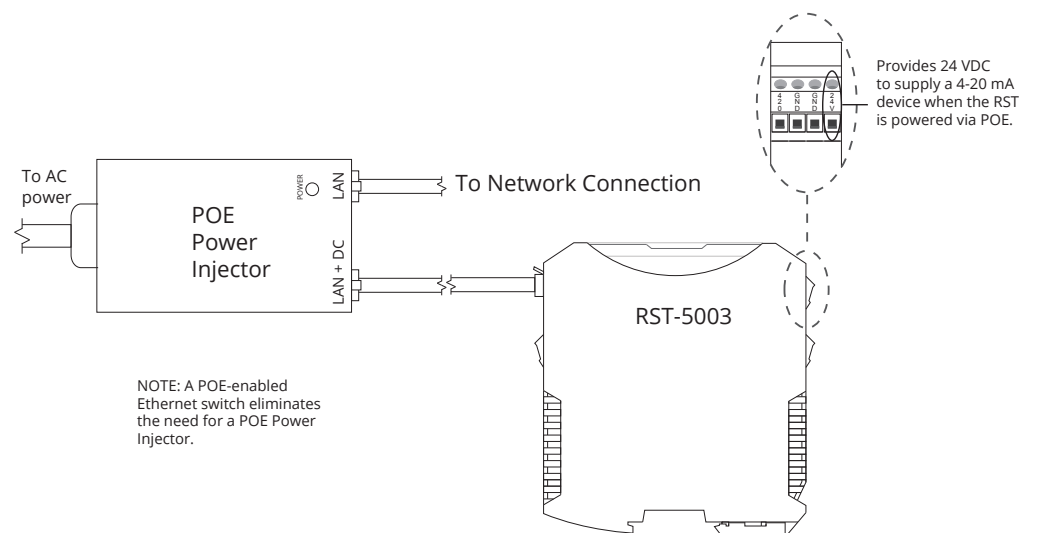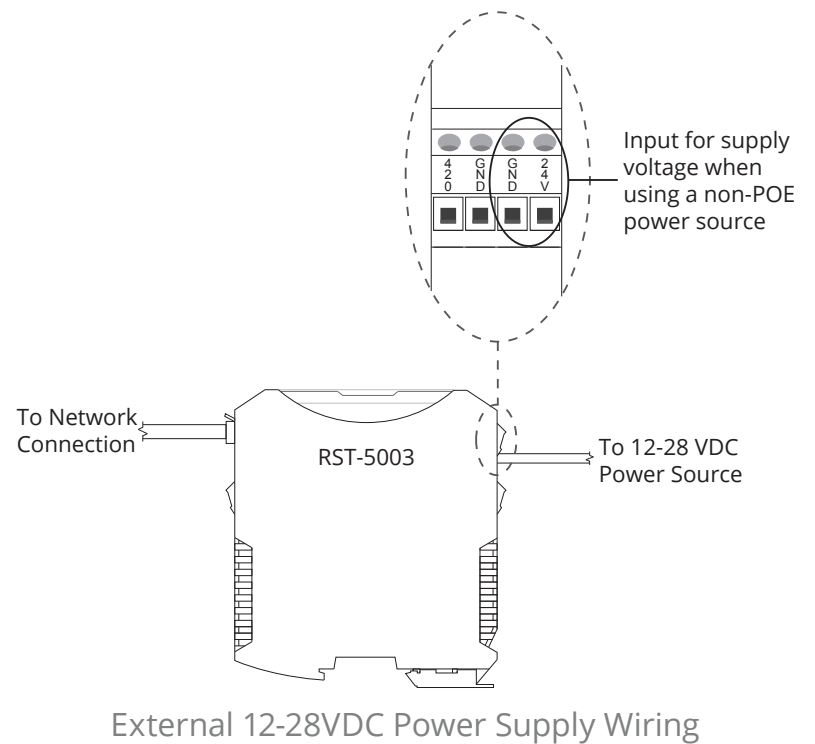BinMaster
PO Box 29709 Lincoln, NE 68529
www.binmaster.com | phone: 402-434-9102 | email: info@binmaster.com

❶ Description

The RST-5003 Web Enabled Control Module offers a wide degree of integrated and flexible remote and local control and monitoring for your system. The RST-5003 can control up to ten compatible Modbus sensors--any combination of level, pressure, magnetostrictive and ultrasonic--along with one 4-20 mA sensor, and two input or out relay terminals. All readings are available for control and monitoring via TCP/IP for local or remote network access. The RST-5003 also had flexible power options: it can use either POE or an independent 12-28 VDC power source.

❷ How To Read Your Label

Each label comes with a full model number, a part number, and a serial number. The model number for the RST-5003 will look something like this:

> ⚗ SAMPLE: RST-5013

The model number correlates with all the configurable options and tells you exactly what you have. Compare the model number to the options on the datasheet to identify your exact configuration. You can also call us with the model, part, or the serial number and we can help you.

❸ Warranty

BinMaster warrants this product against defects in material and workmanship for two (2) years according to the following terms;

1.) This warranty extends to the original purchaser only and commences on the date of original purchase.

2.) BinMaster's sole obligation under said warranty is to repair, or at its option replace the defective parts. The buyer shall have no other remedy. All special, incidental and consequential damages are excluded. The buyer must deliver the product under warranty prepaid to the factory. BinMaster's obligation is limited to the cost of material and labor to repair or replace, and does not include transportation expenses.

3.) This warranty shall be voided, in our sole judgment, by alterations of equipment except by BinMaster, or tampering with, improper installation or maintenance, accident or misuse, or act of God. This warranty expressly excludes all damage to the product resulting from careless or neglectful packaging or transportation. The warranty does not extend to repairs made necessary by normal wear.

4.) This warranty is in lieu of all other warranties, expressed or implied including any implied warranties or merchantability or fitness for particular purpose. No employee, agent, franchise dealer or other person is authorized to give any warranties of any nature on behalf of BinMaster.

5) BinMaster shall in no event be responsible for any warranty work done without first obtaining BinMaster's written consent.

6) Except as provided herein, BinMaster shall have no liability, loss or damage caused or alleged to be caused directly or indirectly by this equipment.

7) This warranty gives the buyer specific legal rights, and you may also have other rights which vary from state to state.

8) For service, please call 402-434-9102.

❹ Installation Procedure

Installing your RST-5003 is easy if you follow a few simple steps:

- Connect any 4-20 mA sensor, relays, or switched inputs first.
- Connect RST to Ethernet/network
- Connect independant 12-28 VDC supply if not using POE.
- Connect and set up one Modbus sensor at a time.

Please keep the following limitations in mind:

- Up to 10 Modbus sensors can be connected to the RST-5003 in any combination.
- Only one 4-20 mA sensor can be connected to the RST-5003.

> ❶ IMPORTANT: Each Modbus sensor must be added to the network individually and assigned a unique Sensor Number before the next sensor can be added.

> 🗒 NOTE: If you can control power to each Modbus sensor individually, you can connect them all simultaneously, and power them on individually.

❺ Dimensions

❻ Power Supply Wiring Diagrams

Input for supply voltage when using a non-POE power source

To Network Connection

RST-5003

To 12-28 VDC Power Source

External 12-28VDC Power Supply Wiring

Provides 24 VDC to supply a 4-20 mA device when the RST is powered via POE.

To AC power

POE Power Injector

To Network Connection

RST-5003

NOTE: A POE-enabled Ethernet switch eliminates the need for a POE Power Injector.

POE (Power Over Ethernet) Wiring

❼ Modbus System Wiring Diagrams
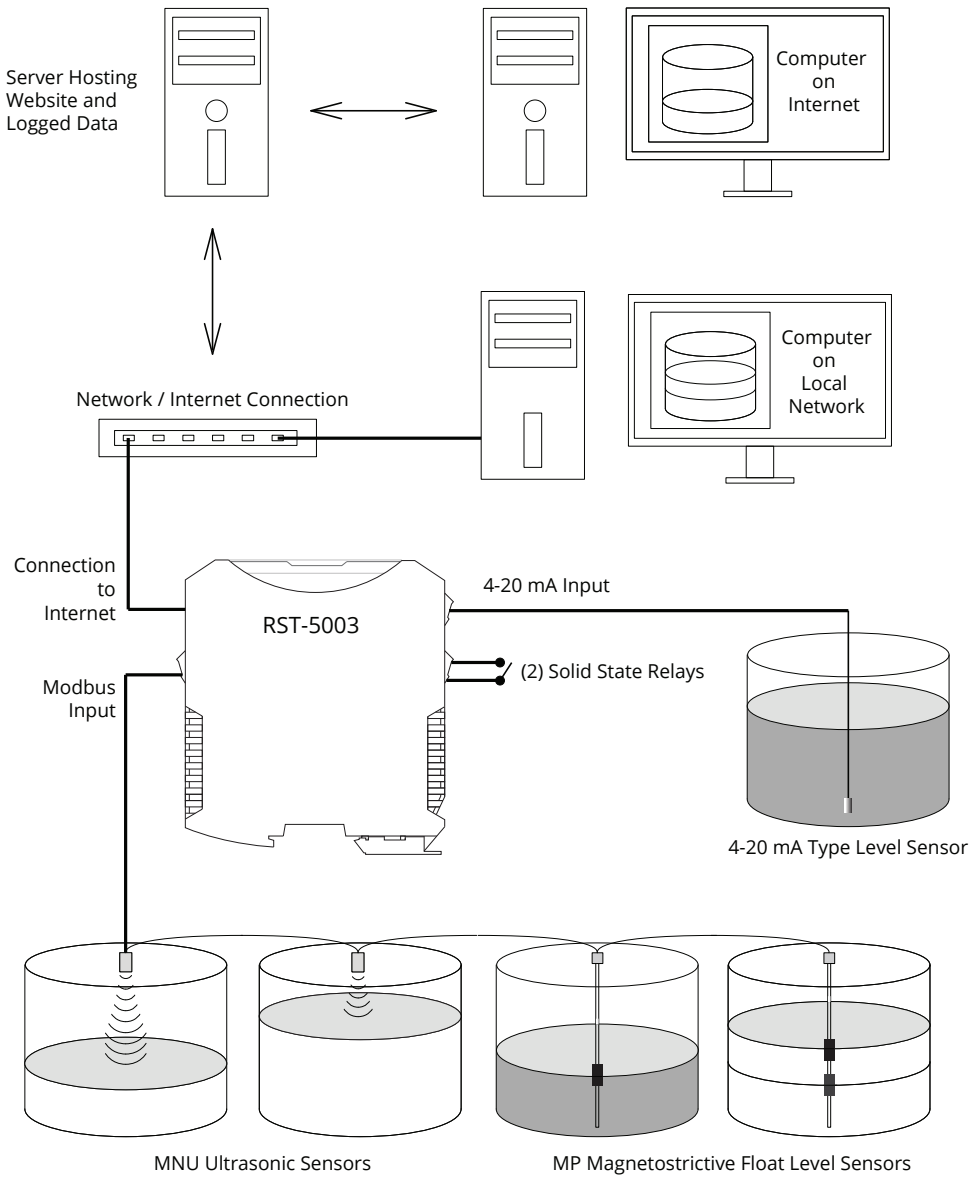
Modbus System & Network Diagram
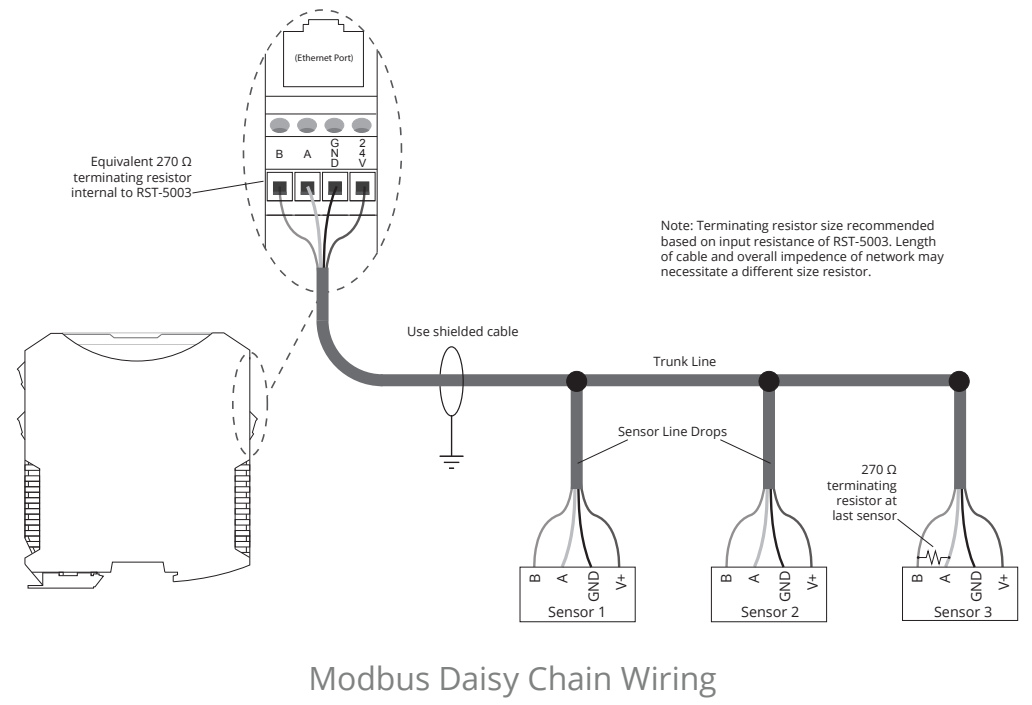
Modbus Daisy Chain Wiring

> ✎ NOTE: Refer to each sensor's user manual for sensor specific wiring instructions. User Manuals for all BinMaster sensors and equipment are available at www.binmaster.com.

❽ Accessing the RST-5003's Embedded Webpage

Each Modbus sensor attached to your RST-5003 must be configured via the RST-5003's embedded webpage before the next sensor can be added. The easiest way to access access the embedded webpage is to type rst_xxx into a web browser on a computer connected to the same local network as the RST-5003. xxx represents the numeric portion of the RST-5003's serial number. See Figures 8.1 and 8.2.
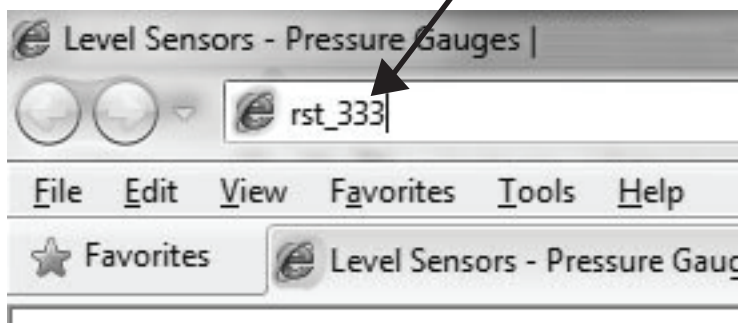

Figure 8.1

Figure 8.2

> ❶ IMPORTANT: See your RST-5003 User Manual for complete Modbus programming instructions and tropubleshooting tips..

❾ General Care

Your RST-5003 is very low maintenance and will need little care as long as it was installed correctly. However, in general, you should:

- Avoid applications for which the control module was not designed, such as extreme temperatures, contact with incompatible corrosive chemicals and fumes, or other damaging environments.

❿ Repair Information

If your RST-5003 control module needs repair, contact us via email, phone, or online chat on our website. We will issue you an RMA number with instructions.

- Phone: 402-434-9102
- Email: info@binmaster.com

⓫ Removal Instructions

- Disconnect power source to control module.
- Disconnect sensors and network cable to control module.
- Remove the control module and store it in a dry place, at a temperature between -40° F and 180° F.