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 888-525-7300.

NOTE: Scan the QR code to the below to visit www.apgsensors.com/support.

APG Support Website

Table of Contents

1.Description
2. How To Read Your Label
3. Warranty
4. Installation Procedure
5. Dimensions
6. Power Supply Wiring Diagrams
7. Modbus System Wiring Diagrams
8. Embedded Webpage
9. General Care
10. Repair Information
11. Removal Instructions

RST-5003 Control Module Installation Guide

Web Enabled Series

Automation Products Group, Inc.
1025 W 1700 N Logan, UT 84321
www.apgsensors.com | phone: 888-525-7300 | email: sales@apgsensors.com

Part # 122950-0012
Doc #9004245 Rev A

1 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 APG 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.

2 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.

3 Warranty

APG warrants its products to be free from defects of material and workmanship and will, without charge, replace or repair any equipment found defective upon inspection at its factory, provided the equipment has been returned, transportation prepaid, within 24 months from date of shipment from factory.

THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representation or warranty, express or implied, made by any sales representative, distributor, or other agent or representative of APG which is not specifically set forth herein shall be binding upon APG. APG shall not be liable for any incidental or consequential damages, losses or expenses directly or indirectly arising from the sale, handling, improper application or use of the goods or from any other cause relating thereto and APG's liability hereunder, in any case, is expressly limited to the repair or replacement (at APG's option) of goods.

Warranty is specifically at the factory. Any on site service will be provided at the sole expense of the Purchaser at standard field service rates.

All associated equipment must be protected by properly rated electronic/electrical protection devices. APG shall not be liable for any damage due to improper engineering or installation by the Purchaser or third parties. Proper installation, operation and maintenance of the product becomes the responsibility of the user upon receipt of the product.

Returns and allowances must be authorized by APG in advance. APG will assign a Return Material Authorization (RMA) number which must appear on all related papers and the outside of the shipping carton. All returns are subject to the final review by APG. Returns are subject to restocking charges as determined by APG's "Credit Return Policy".

4 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.

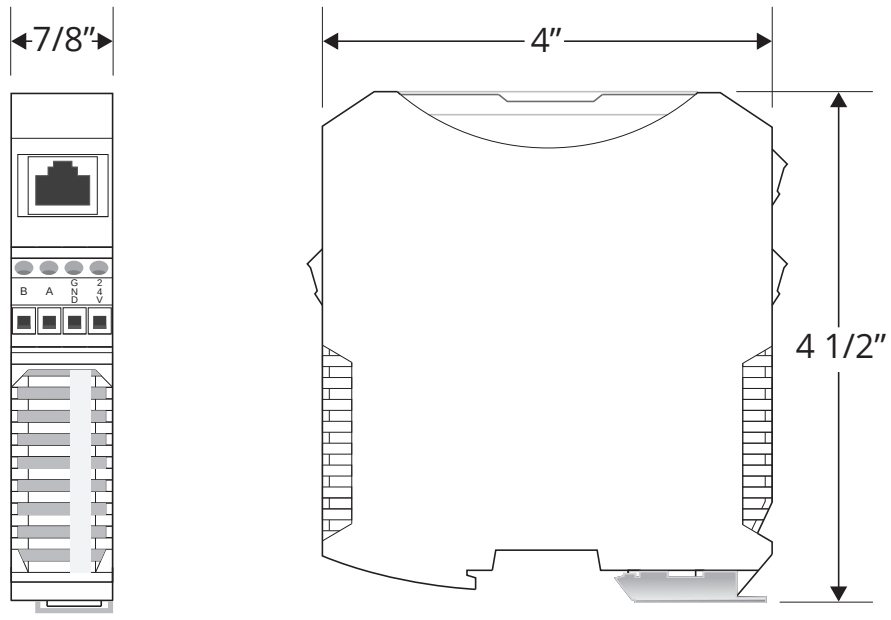
Please keep the following limitations in mind:

- 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.

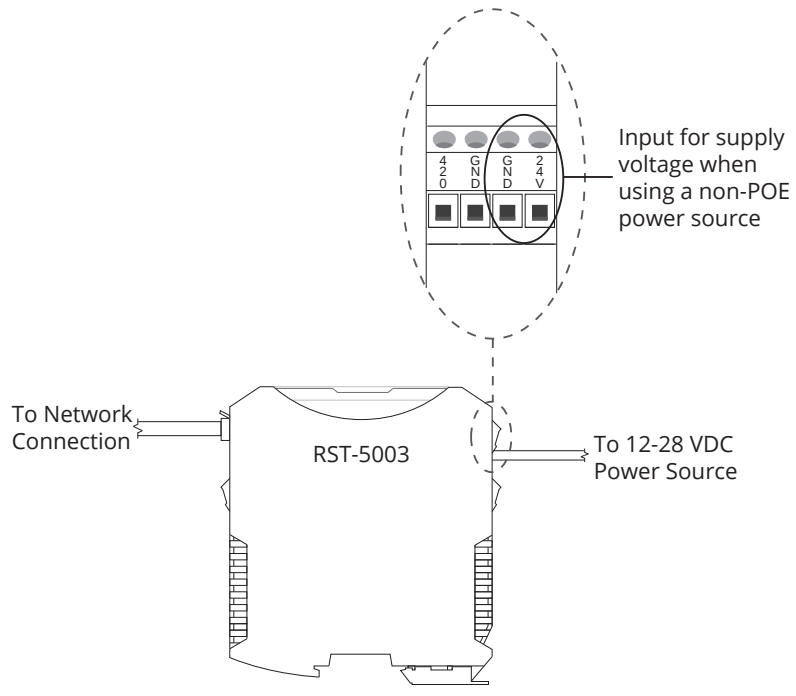
IMPORTANT: Each Modbus sensor must be added to the network individually and assigned a unique Sensor Number before the next sensor can be added.

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

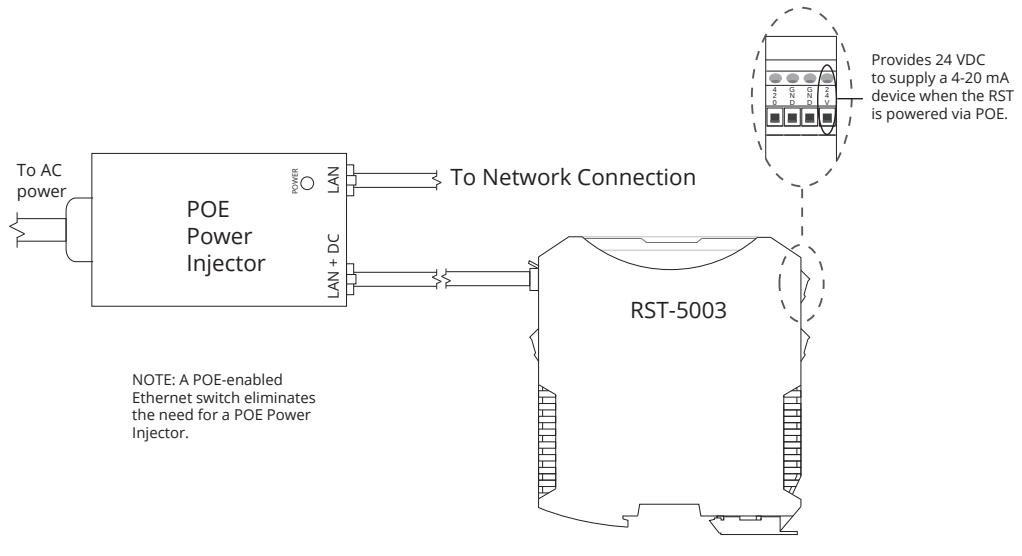
5 Dimensions



6 Power Supply Wiring Diagrams

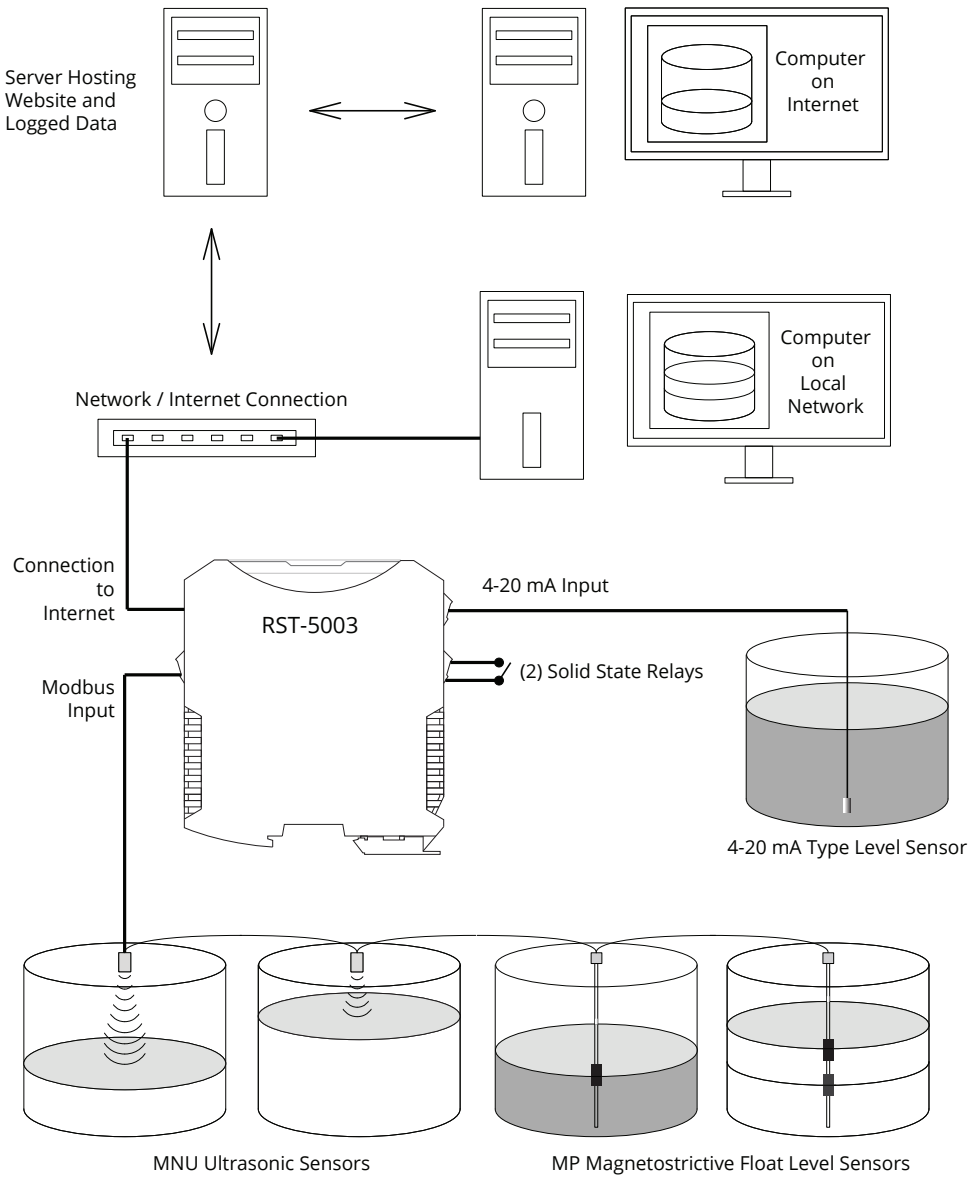


External 12-28VDC Power Supply Wiring

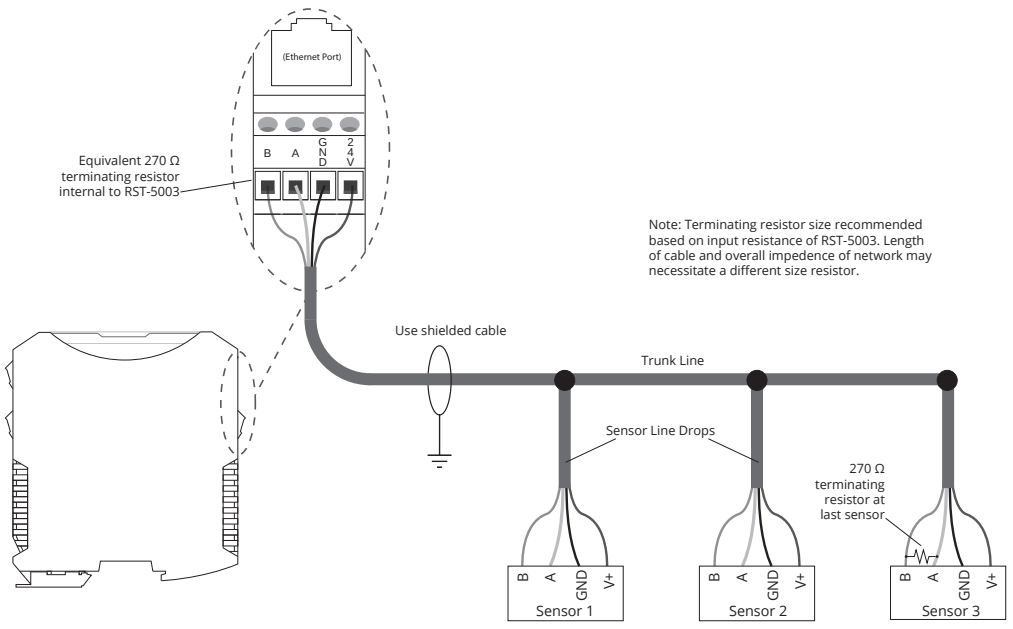


POE (Power Over Ethernet) Wiring

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 APG sensors and equipment are available at www.apgsensors.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

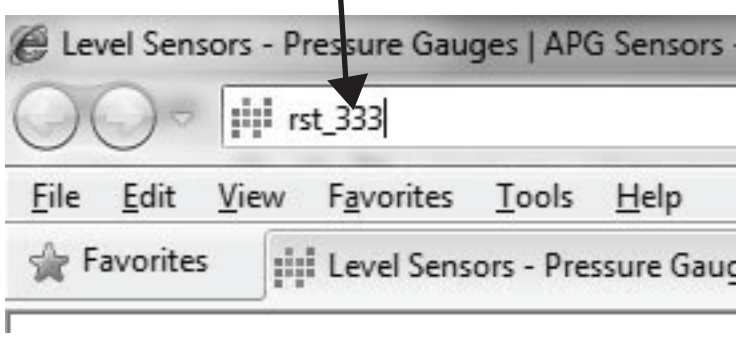


Figure 8.2

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 on-line chat on our website. We will issue you an RMA number with instructions.

- Phone: 888-525-7300
- Email: sales@apgsensors.com
- Online chat at www.apgsensors.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.