## Thank You

Thanks for purchasing a Settler Remote Monitoring Device from APG! 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, don't hesitate to call us at 888-525-7300.

You can find the full Settler manual at: https://apgsensors.com/settler-manual

## **SETTLER**

## **Remote Monitoring Device**

## **Installation Guide**

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# **APG**

Automation Products Group, Inc. 1025 W 1700 N Logan, UT 84321

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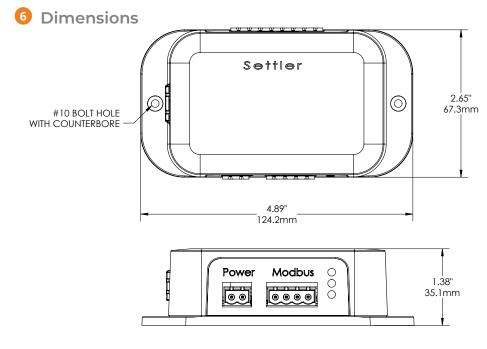
www.apgsensors.com | phone: 888-525-7300 | email: sales@apgsensors.com

## Description

Settler is a versatile remote monitoring gateway designed for seamless sensor data acquisition via Modbus RS485 and 4-20mA inputs. It supports up to four 4-20mA sensors and multiple Modbus sensors. Collected data is encrypted and securely transmitted to APG's cloud-based monitoring platform, Explorer, using MQTT with AES (Advanced Encryption Standard). With Ethernet connectivity, Settler ensures reliable communication and robust data security, making it ideal for remote monitoring and control applications across various environments.

## **How To Read Your Label**

The Settler label indicates the power, 4-20 mA, and Modbus connector pinouts. The manufacturing label contains the part number and the serial number, which is used to identify your Settler in APG's cloud-based monitoring platform Explorer.



Settler

# **Warranty and Return Information**

This product is covered by APG's warranty to be free from defects in material and workmanship under normal use and service of the product for 24 months. For a full explanation of our Warranty, please visit https://www.apgsensors.com/resources/warranty-<u>certifications/warranty-returns/.</u> Contact Technical Support to receive a Return Material Authorization (RMA) before shipping your product back.

If your Settler needs to be returned for evaluation, contact us via email, phone, or on-line chat on our website. We will issue you an RMA number with instructions. You can also find the form on our website by clicking "RMA" in the web footer, or go to https://share.hsforms.com/1rPTIAWbsTMiD0XD\_SkBs6g2rio0.

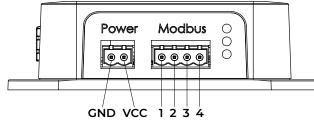
- Phone: 888-525-7300
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- Online chat at www.apgsensors.com

Please have your part number and serial number available.

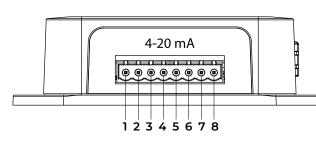
# Wiring Information

## **Supply Voltage**

- 5 to 32 VDC
- 10 mA at 24V



	Modbus	odbus Pinout			
	1	А			
	2	В			
	3	VCC			
_	4	GND			



4-20mA	4-20mA Pinout		
1	4-20 in 4		
2	Vout		
3	4-20 in 3		
4	Vout		
5	4-20 in 2		
6	Vout		
7	4-20 in 1		
8	Vout		

## **General Care**

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

- · Avoid applications for which Settler was not designed, such as extreme temperatures, contact with incompatible corrosive chemicals, or other damaging environments.
- Avoid applications with excessive moisture.

Settler is designed for indoor use only.

# **Mounting Settler**

Settler can be mounted in environments that meet the following conditions:

- Ethernet accessibility (wired network access is required).
- The device is protected from excessive moisture, extreme heat, or corrosive environments.
- Adequate space is provided for wiring connections.

Securely mount Settler to a surface or a DIN rail adapter using size #10 bolts.

## Connect Ethernet:

- Use a CAT5, CAT5e, or CAT6 Ethernet cable.
- · Settler operates in DHCP-only mode. Ensure your network has an active DHCP server to assign an IP address.
- · When the device connects successfully, it will establish a secure link with explorer.apgsensors.com where you can configure your Settler and sensors.

## Connect Power:

• Connect power wires to power connector according to the pinout.

# In the Box

Inside the box you will find:

- · Settler Remote Monitoring Device
- Power Connector (2-Pin)
- Modbus (RS485) sensor connector (4-Pin)
- 4-20mA sensors connector (8-Pin)

Ensure you have all components before proceeding.

## 9 LED Indicators

	LED Color	State	Meaning
	Green	Solid	Settler is powered on
	Yellow	Blinking Fast	Searching for internet connection
	Yellow	Blinking Slow	Connecting to explorer.apgsensors.com
	Yellow	Solid	Successfully connected to explorer.apgsensors.com
	Red	Solid	Error detected — check connections and settings

Once the Yellow LED is solid, Settler is fully operational and is sending data to explorer.apgsensors.com

## 10 Connect Sensors

## For 4-20mA inputs:

- Each Settler unit supports up to four 4-20mA sensors.
- Wire each sensor to the corresponding terminals on Settler.
- The number indicated on the pinout (ie. IN4) refers to the Power Line.

#### For Modbus RS485:

- Wire sensors according to the pinout on the label.
- If connecting multiple sensors, connect and setup sensors one at a time at explorer.apgsensors.com before adding the next one.

# 11 Connect to Explorer

New users are sent an email invitation to sign up in Explorer. Existing users can send invitations to other members of their organization. If you did not receive an invitation email, please contact APG.

## **Set Up New Sensors**

- 1. Go to <u>explorer.apgsensors.com</u> and sign in.
- 2. Click "My View" at the top of Explorer webpage.
- 3. Click the Group card.
- 4. Click your Gateway card. Check the label on the side of Settler to identify its unique Gateway ID number (serial number).
- 5. On the Sensors page, click the "Configure Gateway" button on the right.
- 6. Follow the steps of the Gateway Configuration Wizard.
  - a. Name the Gateway.
  - b.  $\,\,$  Add sensors. For APG sensors, choose the sensor from the Sensor Model dropdown list. Give the sensor a name. Set the Modbus ID (Modbus sensors) or select the Power Line (4-20mA sensors).
  - c. Set Gateway Timings, Alarms (optional), and Location (optional).
  - d. Click "Finish" to save the configurations and send any pending commands.
- 7. To see sensor readings, click on the Sensor card and look at the Chart.

 $\mbox{\bf NOTE}.$  For a complete description of the features and tools in Explorer, check out the official **Explorer User Manual** at <a href="https://apgsensors.com/explorer-manual">https://apgsensors.com/explorer-manual</a>