



Settler

Remote Monitoring Device

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). Settler offers four connectivity models to ensure reliable communication across various environments:

1. Ethernet: Connects via a standard network cable
2. Wi-Fi: Supports wireless setup through a secure 2.4 GHz network
3. PoE (Power over Ethernet): Streamlines installation by providing both data connectivity and power through a single cable, eliminating the need for a separate power supply at the installation site.
4. Cellular: Connects to any major cellular provider in US and Canada.

Features

- Real-time data acquisition via 4-20mA and Modbus RS485 inputs.
- Secure communication with MQTT with AES (Advanced Encryption Standard).
- Flexible connectivity models: Available in Ethernet, Wi-Fi, PoE (Power over Ethernet), or Cellular models.
- Compact and versatile design suitable for industrial environments.
- OTA (Over-the-Air) updates for remote firmware management.
- Wi-Fi onboarding via built-in access point for easy initial setup (Wi-Fi models only).

SPECIFICATIONS

Applications

Industrial Automation
Remote Monitoring
IoT Deployments
Smart Agriculture

Environmental

- **Operating Temperature**
-20° to 85°C (-4° to 185°F) (Ethernet or Wi-Fi models)
-40° to 85°C (-40° to 185°F) (PoE or Cellular models)
- **Humidity**
5% to 95% non-condensing
- **Ingress Protection**
IP40

Electrical


- **Power Supply:**
12 to 32 VDC
40 mA at 24V
- **PoE Model Power Supply:**
Power over Ethernet (IEEE 802.3af/at)
Auxiliary Output: 9W (@24V) available for sensor power via PoE

Connectivity

- **Input / Output**
Modbus RS485 input
4x 4-20mA analog inputs
(active loop power provided)
- **Protocols & Security**
MQTT with AES encryption (End-to-End)
Over-the-Air (OTA) Firmware Updates: Enabled
- **Communication Interfaces**
10/100 Mbps Ethernet port (Ethernet and PoE models)
802.11 b/g/n Wi-Fi (Wi-Fi models, 2.4 GHz only)
LTE Cat-M1 / NB-IoT Cellular (Cellular models)
- **LED Indicators**
Power Indicator
Communication Status Indicator
Error Status Indicator

Physical

- **External Dimensions**
Length: 124.2 mm (4.89 in)
Height: 35.1mm (1.38 in)
Depth: 67.3 mm (2.65 in)
Height with antenna: 158.7 mm (6.25 in) (Cellular models only)
- **Mounting Option**
Flanges allowing DIN rail mounting

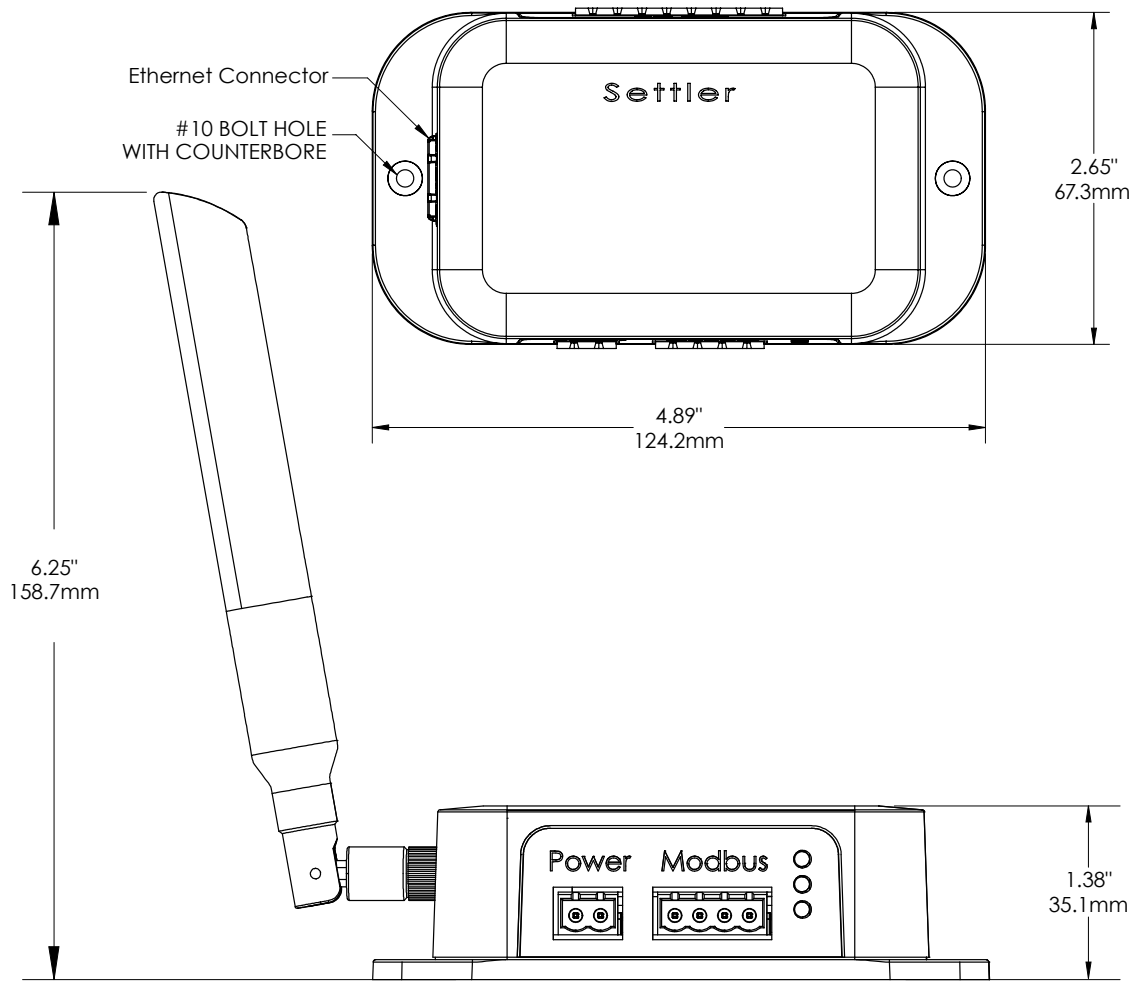
 **NOTE:** Cellular models require APG-provided SIM card. Contact APG for information about cellular data rates and activation.

MODEL OPTIONS

Part Number	Model Description
125422-0001	Settler Ethernet
125422-0002	Settler Wi-Fi
125422-0003	Settler PoE
125422-0004	Settler Cellular



DIMENSIONS



Settler

NOTE: Ethernet Connector only available for Ethernet and POE models. Antenna only available for Cellular models.

REGULATORY COMPLIANCE

Settler Wi-Fi Models

This device contains a 2.4 GHz Wi-Fi transceiver based on the Infineon CYW43439 chipset. The wireless module is certified under the following regulations:

FCC ID: 2ABCB-RP2040

IC: 20953-RP2040

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED (Canada) Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil contient des émetteurs/récepteurs exemptés de licence qui sont conformes aux CNR d'Innovation, Sciences et Développement économique Canada. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Settler Cellular Models

This device contains a cellular transceiver module based on the Quectel BG95-M3 chipset. The cellular module is certified under the following regulations:

FCC ID: XMRBG95M3

IC: 10224A-BG95M3

FCC Statement

This device complies with Part 15 of the FCC Rules and with Part 22/24/27 as applicable for cellular operation. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This device contains a certified cellular module. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter procedures.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED (Canada) Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil contient des émetteurs/récepteurs exemptés de licence qui sont conformes aux CNR d'Innovation, Sciences et Développement économique Canada. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

