

Settler

Remote Monitoring Device

Datasheet



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 or Wi-Fi connectivity model options, Settler ensures reliable communication and robust data security, making it ideal for remote monitoring and control applications across various environments. The Ethernet version connects via a standard network cable, while the Wi-Fi version supports wireless setup and communication through a secure 2.4 GHz network.

Features

- Real-time data acquisition via 4-20mA and Modbus RS485 inputs.
- Secure communication with MQTT with AES (Advanced Encryption Standard).
- Ethernet or Wi-Fi support for flexible network connectivity (model-dependent).
- 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)
- **Humidity**
5% to 95% non-condensing
- **Ingress Protection**
IP40

Electrical

- **Power Supply**
5 to 32 VDC
10 mA at 24V

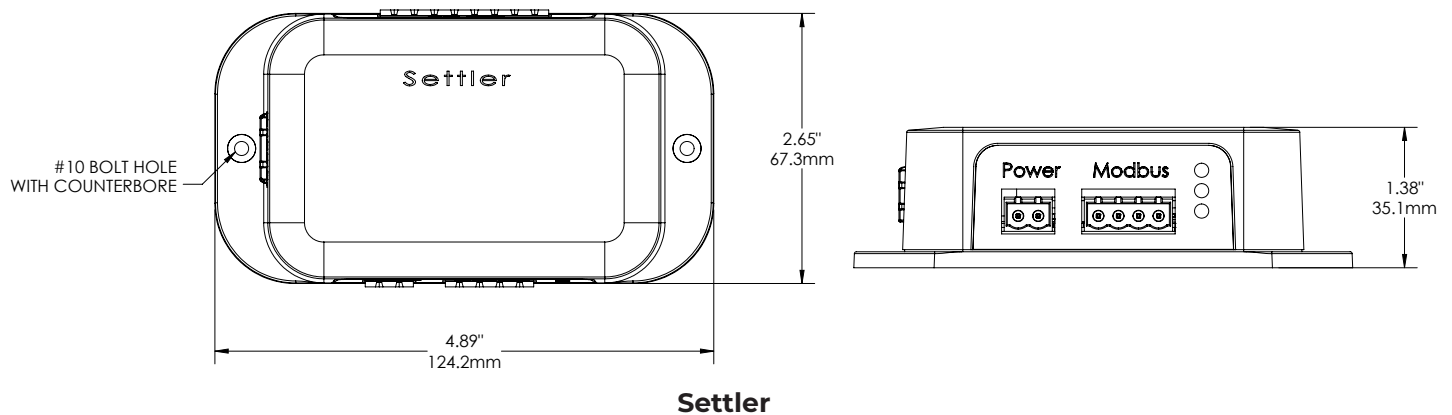
Connectivity

- **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 models)
802.11 b/g/n Wi-Fi (Wi-Fi models, 2.4 GHz only)
- **LED Indicators**
Power Indicator
Communication Status Indicator
Error Status Indicator

Physical

- **External Dimensions**
Length: 124.3 mm
Height: 35.0 mm
Depth: 67.3 mm
- **Mounting Option**
Flanges allowing DIN rail mounting

DIMENSIONS



Note: Wi-Fi models do not include an Ethernet port.

MODEL OPTIONS

Part Number	Model Description
125422-0001	Settler Ethernet
125422-0002	Settler Wi-Fi

Regulatory Compliance

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.

