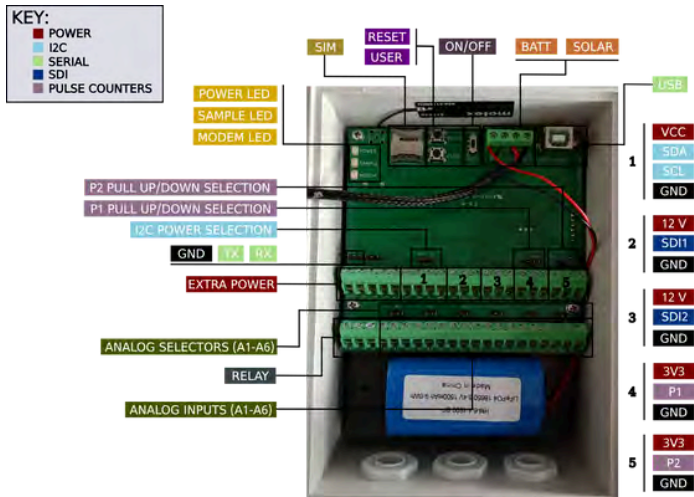# Datasense Agro Logger

Autonomous datalogger designed to monitor crops remotely

Hardware features

Specifications

- 6.4V LFP rechargeable battery
- Integrated solar panel
- 2G/NB-IoT/LTE-M modem
- 3.3V, 5V and 12V supply voltages for sensors
- 1x serial panel for configuration
- 1x I2C port
- 2x low power pulse counters
- 6x analog inputs
- 2x SDI-12 ports
- 1x output relay
- 3x LEDs for quick debugging (Power, Sample and Modem)
- 2x user buttons (RESET and USER)
- 1x 3FF SIM card slot

Enclosure

- IP66, ABS plastic enclosure
- 3x IP68 PG7 nylon cable gland
- 1x IP68 breathable vent plug
- Stainless steel mount for poles available

Application examples

- Professional weather station (anemometer, rain collector, temperature and humidity sensors)
- Multi-level soil analytics (moisture, temperature, electrical conductivity)
- Water consumption monitor

* External sensors and components may be necessary

Device setup and data access

Local device management

Text-based CLI for on-site interaction (external USB-Serial adapter required).

Modify device settings such as:
- SIM card settings
- MQTT broker credentials for data
- Sampling frequency
- Power saving settings
- Payload content and format
- *More than 50 other parameters available*

Perform debugging actions:
- Test power buses
- Test communications
- Test sensors

Remote device management

Devices integrate with our Datasense Hello Platform. Users can access it through an API.

Main features:
- Modify device settings*
- Over-The-Air (OTA) updates
- Trigger remote actions
- Collect diagnostics

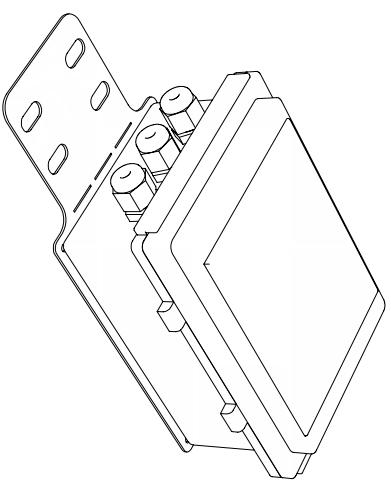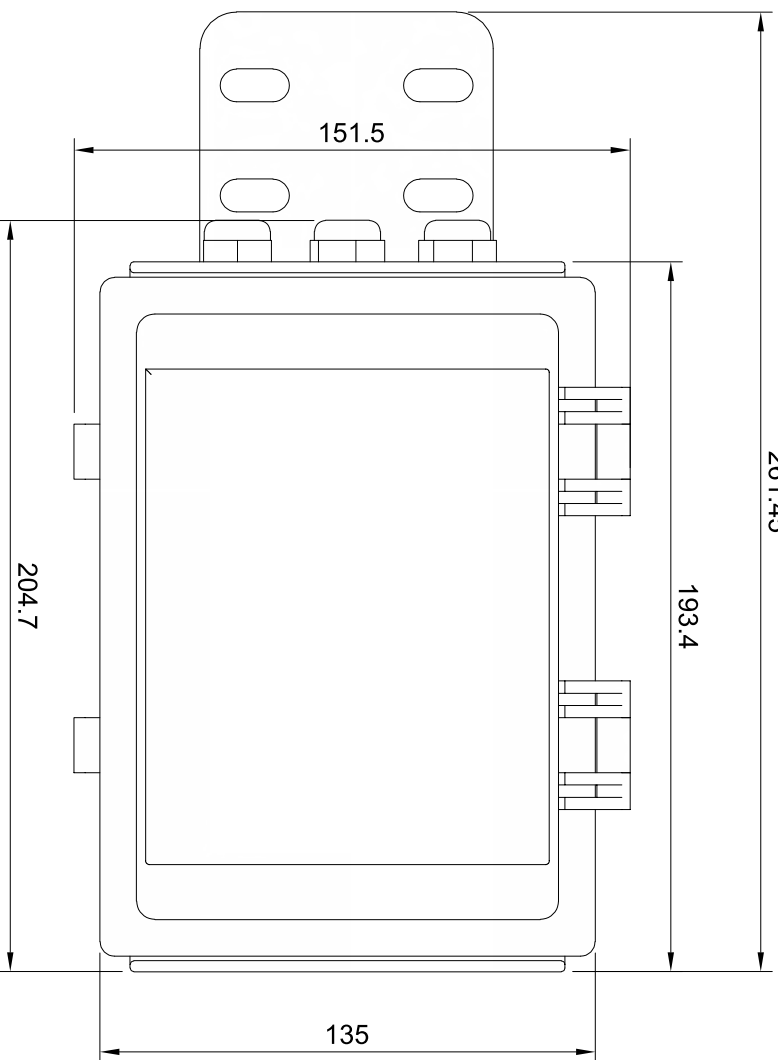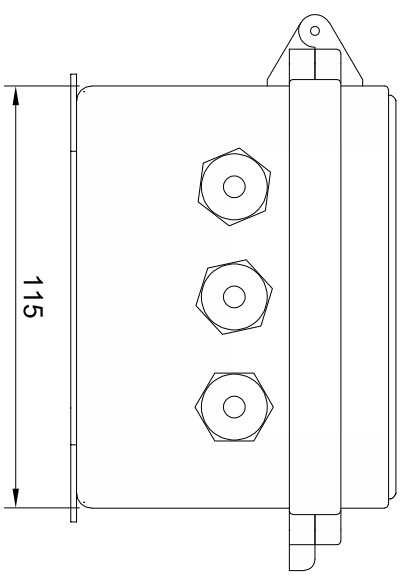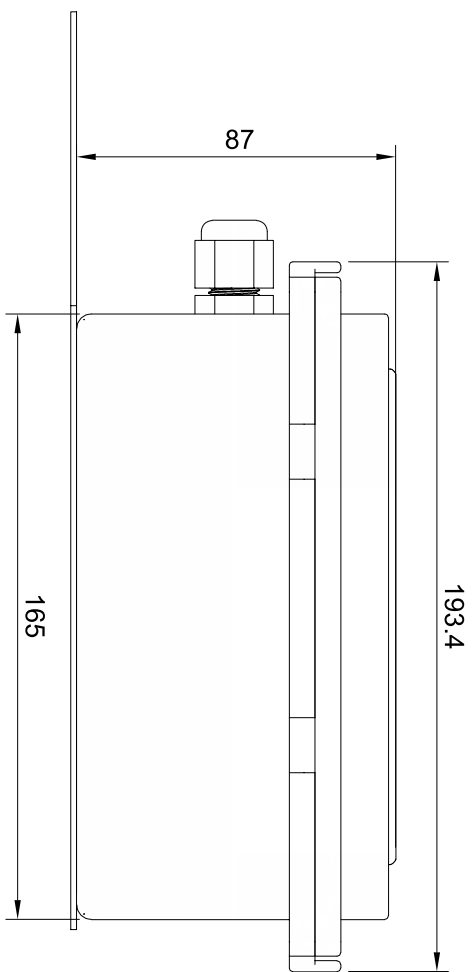** Check available settings in "Local device management"*

Data management

Data is securely sent to an MQTT broker.

- OPTION 1
  - Datasense broker
  - Users can access data through Datasense's API
  - 1-year of data retention

- OPTION 2
  - User private broker
  - SC Robotics can't access the data

151.5

87

261.45

193.4

165

193.4

204.7

135

115

Datasense Agro Logger
Dimensions of enclosure and holder

datasense
/BY SC ROBOTICS