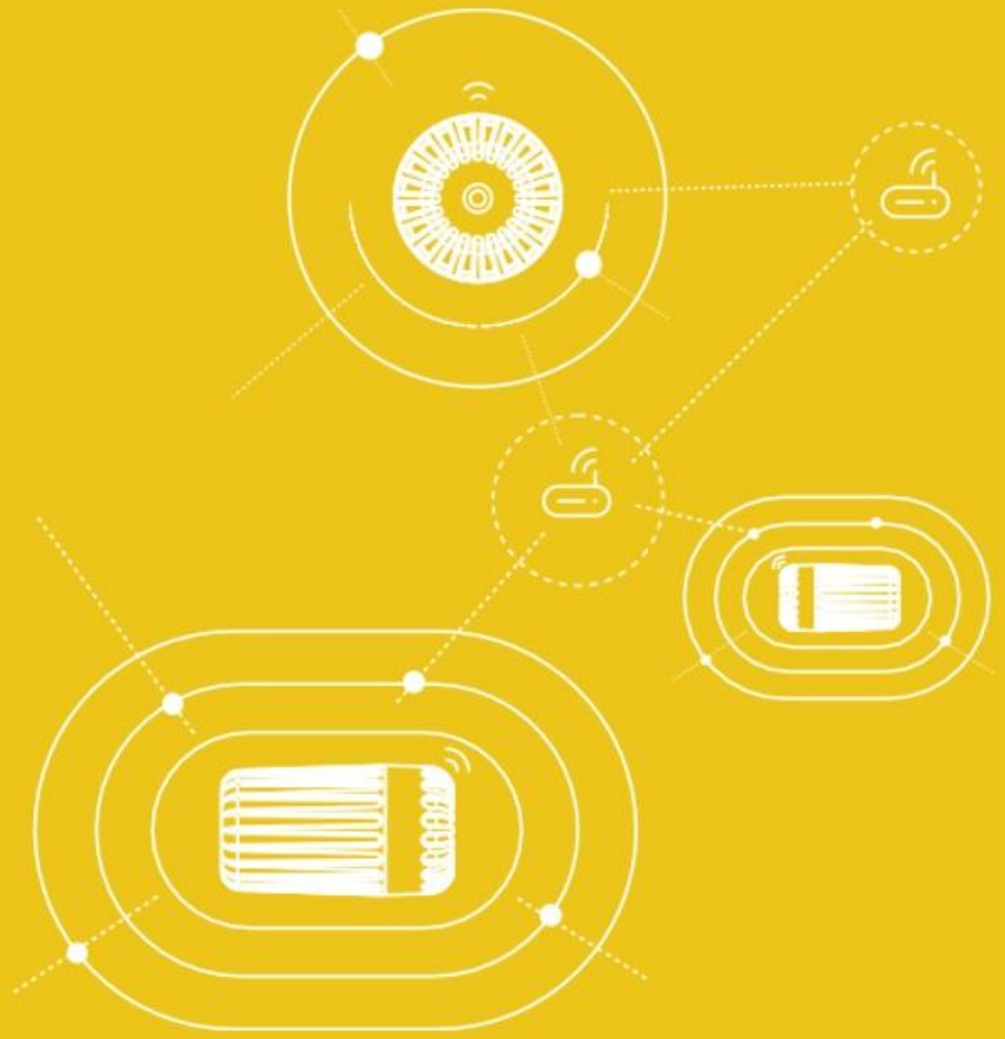
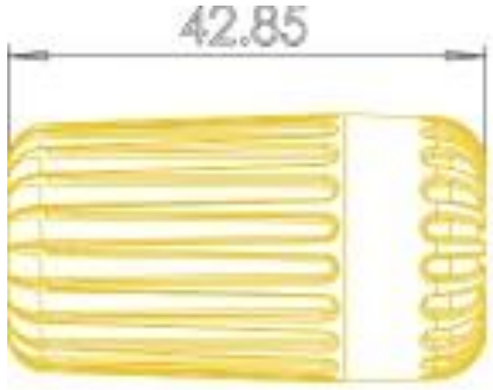
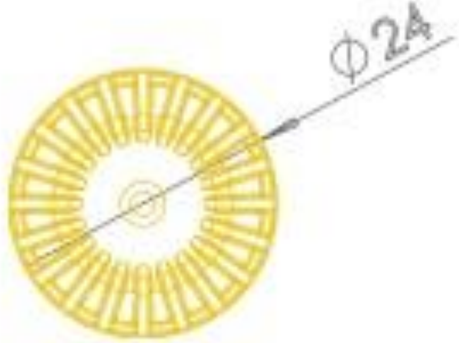


Sensor Network

Sensor and Gateway



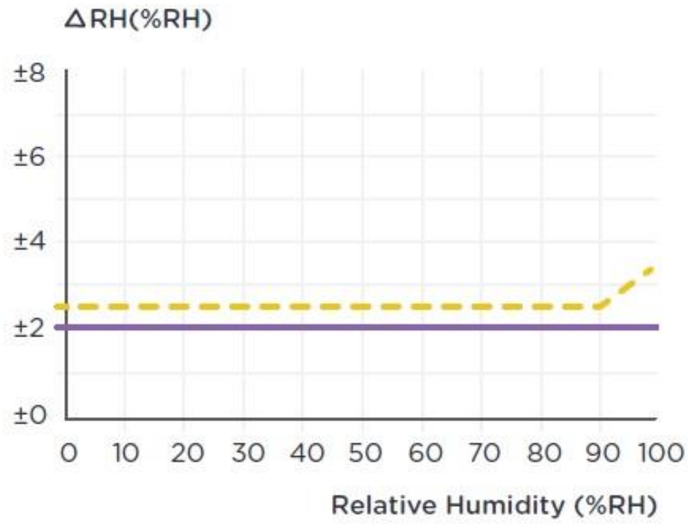


- Easy installation process, requiring only a 24mm hole for placement.
- Waterproof case with 10-year battery life and 10-minute gateway connection period.
- File server communication 4G or WIFI network
- This device enables file server communication via 4G or WiFi, allows for up to 50 sensor connections, runs on an internal battery for 10 days, and can function autonomously with a 20W solar panel.

Accuracy of the Sensors

Humidity measurements

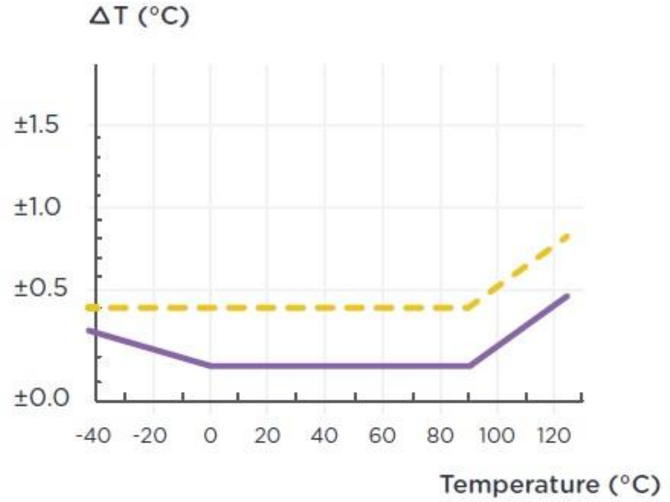
Typical tolerance: **±2%** RH
(In **0%** to **90%** RH range)
Maximal tolerance: **±3.2%** RH
(In **90%** to **100%** RH range)



maximal tolerance
typical tolerance

Temperature measurements

Typical tolerance: **±0.2** Deg
(In **0** to **90** RH range)
Maximal tolerance: **±3.2%** RH
(In **90%** to **100%** RH range)



maximal tolerance
typical tolerance

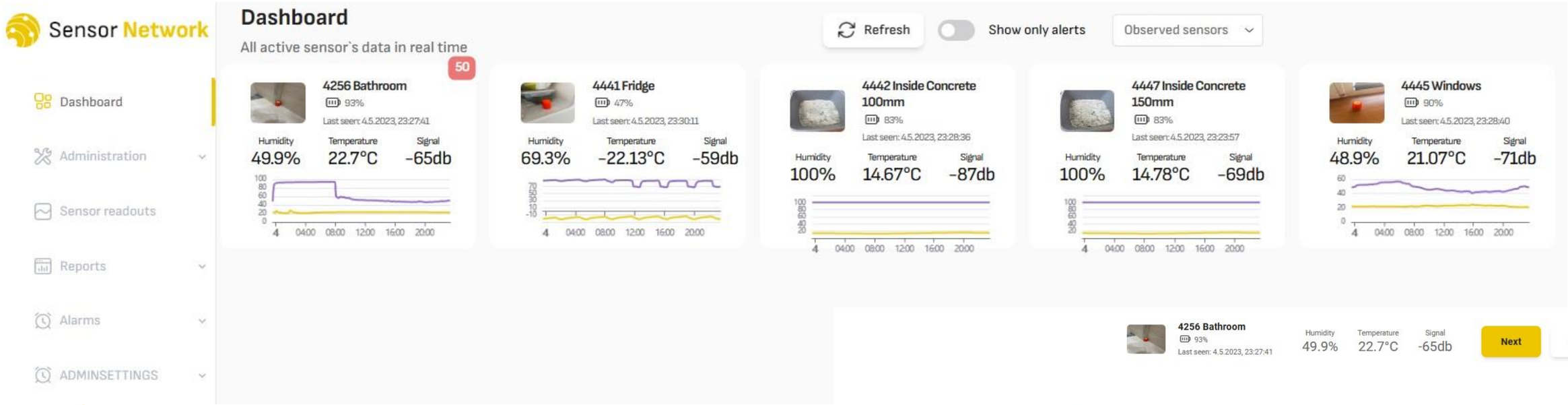
Accuracy (max): **±0.2** °C (in **-10** to **+40**°C range)
Accuracy (min): **±0.5** °C (in **-20** to **+60**°C range)
Resolution: **0.1** °C

Technical Specification of the Gateway

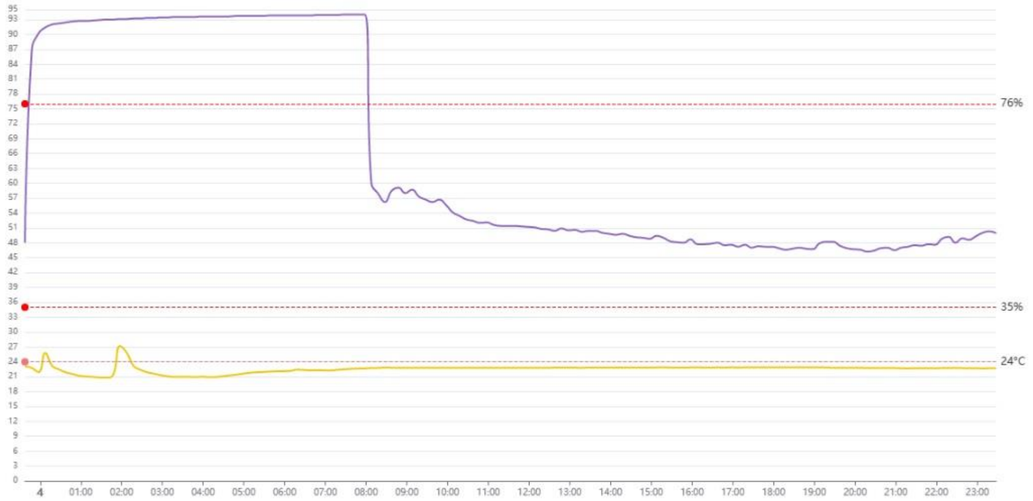
	Parameter	Description
1.	Sensor’s frequency communication	868 Mhz
2.	File server communication	4G (APN settings from the Computer or Android App), WIFI 2.4 Ghz (SSID and Password settings from Computer or Android App
3.	Direct download of stored data.	USB cable locally. The data can be sent to the file server later.
4.	Internal storage.	470000 Hours per unit.

- Design for outdoor mounting at the rural placers
- Three models optimized for different applications
- Different type of antennas for better performance

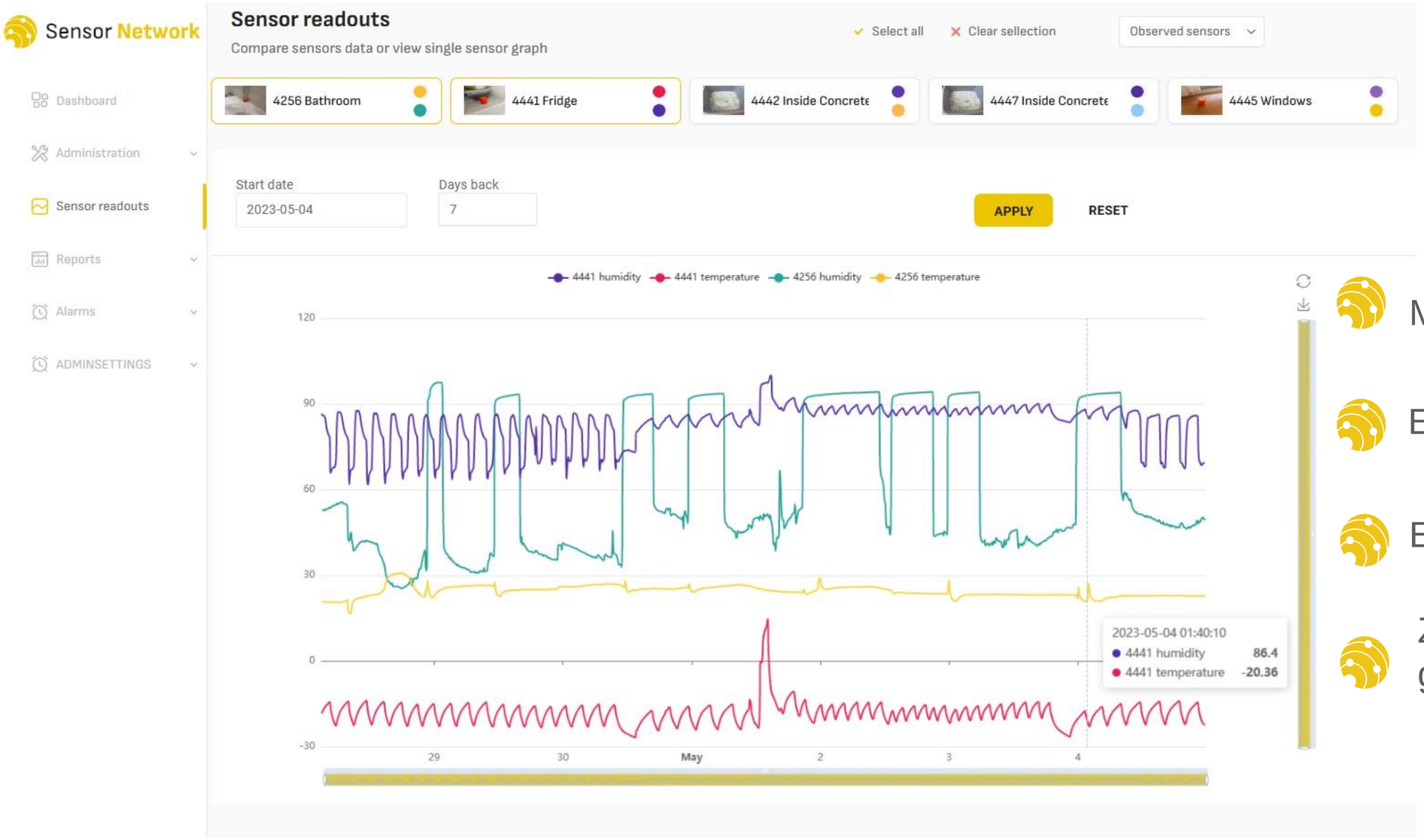
Dash Board for Live Monitoring



- Live update of the temperature and humidity
- Update the display in real-time to reflect changes in signal strength and battery level
- Alerting system with thresholds visualization
- Last seen information

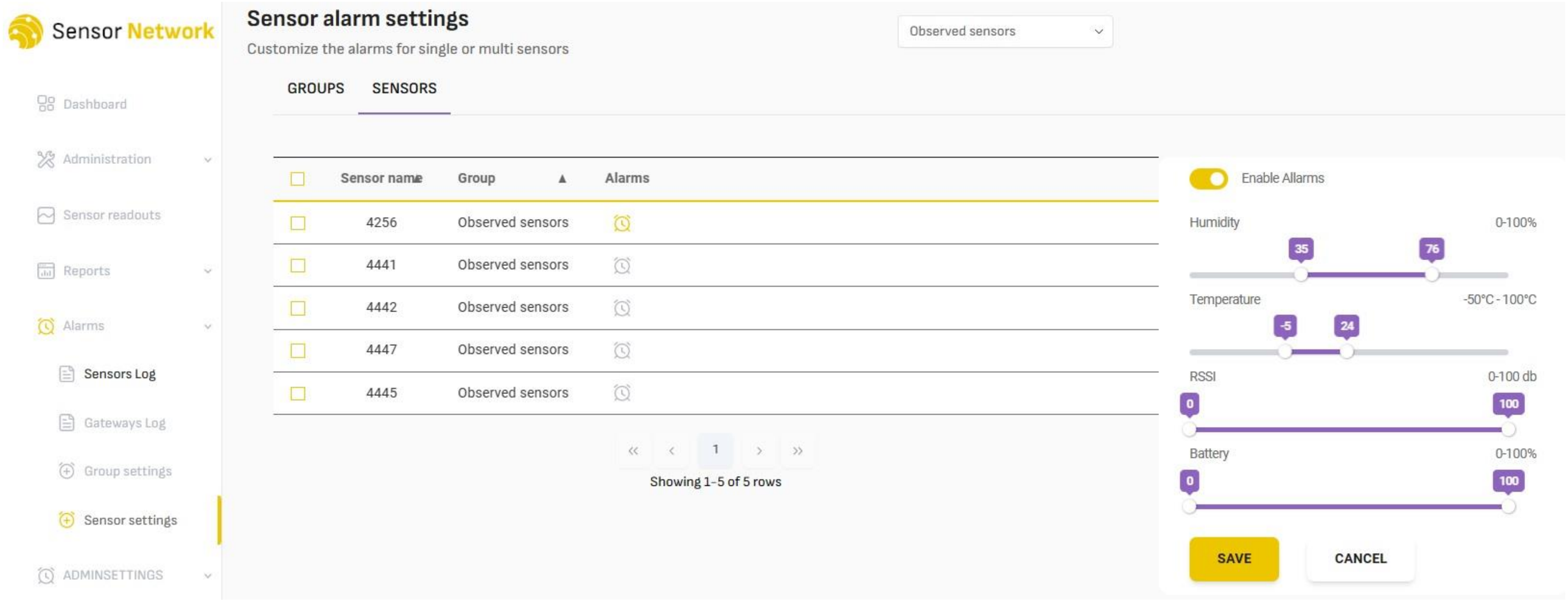


Multiple Sensors Visualization



- Multiple sensor visualization
- Export of the data in CSV format
- Easy access to the history data
- Zoom and download the graphics

Easy Adjusted Alerting System



Easy settings of the alarm thresholds for group and sensors.

Application of the Solution

- Monitoring buildings during both the construction and exploitation phases.
- Infrastructure projects.
- Mass concreting projects such as subways and dams.
- Wood flooring contractors.
- Manufacturers and distributors of wooden flooring.
- Industrial facilities for monitoring temperature and humidity levels during manufacturing processes.
- Pharmaceuticals and biotech companies for monitoring environmental conditions during medication and vaccine production.
- Hospitals and healthcare facilities for monitoring temperature and humidity levels for patient comfort and infection control.
- Energy and power plants for monitoring environmental conditions to prevent equipment failure.
- Warehouses and logistics companies for monitoring temperature and humidity levels for sensitive goods storage.
- Green energy systems such as solar or wind power plants for monitoring environmental conditions to optimize performance.
- Museums, art galleries, and archives for monitoring temperature and humidity levels for the preservation of art and historical artifacts.