SENSE IT
TECHNOLOGIES
MONITORING AND CONTROL SOLUTIONS



LoRaWAN Submersible Level Sensor - 5m

SKU: SI-LRW-SBM-LEV-001

Solar-powered LoRaWAN® water level logger for remote monitoring of dams, reservoirs, tanks, boreholes and other water sources. The submersible level probe continuously measures water level, while the integrated solar-powered logger transmits readings wirelessly to the Sense It platform for remote monitoring and historical analysis.

OVERVIEW

The LoRaWAN® Water Level Logger is a solar-powered remote monitoring solution designed to measure water levels in dams, reservoirs, tanks, boreholes and other water storage or natural water sources.

The system combines a rugged outdoor LoRaWAN data logger with a submersible water level probe. The probe is installed directly in the water and measures the hydrostatic pressure above the sensor, allowing the system to determine the water depth or level.

Powered by an integrated solar panel with rechargeable lithium battery backup, the logger is designed for continuous autonomous operation in remote locations without requiring mains power. Its IP67-rated enclosure protects the electronics against rain, dust and harsh outdoor environments.

Measurements are transmitted using LoRaWAN® to a nearby LoRaWAN gateway and then securely uploaded to the Sense It platform. Users can remotely view current water levels, historical trends and changes over time from a computer, tablet or mobile device.

The system can be configured according to the dimensions of the dam, tank or reservoir, allowing water depth measurements to be converted into percentage full, volume or other application-specific values where the required dimensions or volume profile are available.

Configurable alerts can notify users when water levels fall below or rise above defined thresholds, helping improve water management and providing early warning of low supply, abnormal consumption, overflow conditions or other critical events.

Designed for long-term unattended operation, the solution is suitable for agriculture, irrigation, livestock water management, industrial water storage and environmental monitoring applications.

KEY FEATURES

- Solar-powered operation
- Rechargeable lithium battery backup
- LoRaWAN® long-range wireless communication
- Submersible water level probe
- Continuous remote water level monitoring
- Suitable for dams, reservoirs, tanks and boreholes
- Water depth monitoring
- Percentage-full calculation

- Volume calculation where vessel dimensions/profile are known
- Real-time cloud monitoring
- Historical level graphs and trends
- Configurable high and low level alerts
- Low-water warning notifications
- IP67 weatherproof logger enclosure
- Designed for permanent outdoor installation
- No mains power required at the monitoring point
- Long-range communication across farms and remote sites
- Easy field installation
- Scalable across multiple dams, tanks or sites
- Access from mobile, tablet or desktop

TECHNICAL SPECIFICATIONS

General

- Product Type: Remote Water Level Logger
- Wireless Technology: LoRaWAN®
- Monitoring Type: Hydrostatic Water Level
- Designed for remote and unattended monitoring

Sensor

- Sensor Type: Submersible Hydrostatic Level Probe
- Measurement: Water Level / Depth
- Installation: Submerged in water
- Output: Analogue signal to LoRaWAN logger
- Probe Housing: Stainless Steel
- Measurement Range: Available in different ranges to suit application

Calculated Values

- Water Depth
- Percentage Full
- Water Volume (where vessel dimensions/profile are configured)

Connectivity

- Wireless Protocol: LoRaWAN®
- Long-range wireless communication
- Requires compatible LoRaWAN gateway
- Remote cloud monitoring via Sense It platform

Power

- Integrated Solar Panel
- Rechargeable Lithium Battery
- Designed for continuous autonomous operation
- No mains power required at sensor location

Enclosure

- Ingress Protection: IP67
- Designed for permanent outdoor installation
- Suitable for harsh agricultural and environmental conditions

Monitoring

- Real-time sensor readings
- Historical data logging
- Historical level graphs
- Configurable high and low level thresholds
- Remote device monitoring

Installation

- Logger: Pole or wall mounted
- Probe: Submersed in dam, tank, reservoir or borehole
- Suitable for remote field installation

Applications

- Dam Level Monitoring
- Reservoir Level Monitoring
- Water Tank Monitoring
- Borehole Water Level Monitoring
- Irrigation Water Management
- Livestock Water Monitoring
- Industrial Water Storage
- Environmental Monitoring
- Remote Water Resource Monitoring

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