

packet**SENSE**

Submersible Hydrostatic Pressure Level



The **packetSENSE Submersible Hydrostatic Pressure Level** is a high-precision, real-time monitoring device designed for LoRaWAN® networks. It continuously measures liquid levels by detecting the hydrostatic pressure generated by the height of the liquid above the sensor.

Engineered for energy efficiency, it features ultra-low power consumption, ensuring long-term, maintenance-free operation. Compact and reliable, this sensor is ideal for a wide range of commercial, industrial, and environmental applications, providing accurate and continuous water level monitoring in tanks, reservoirs, and open bodies of water.

Features

- **Durable construction** – Resistant to abrasion, oil, acids, and alkalis.
- **Flexible installation** – Suitable for both indoor and outdoor use.
- **Versatile performance** – Works in static or flowing water environments.
- **Long battery life** for extended field operation.
- **LoRaWAN® compatible** for reliable wireless data transmission.

Applications

- **Deep well** level measurement
- **River and coastal** hydraulic monitoring
- **Sewage and wastewater** treatment
- **Muddy liquid** level detection
- **Reservoir and tank** level monitoring
- **Water-saving** irrigation systems
- **Water diversion** and distribution projects

Technical Specification

Wireless Communication Supported

Technology	LoRaWAN®
Frequency Band	AS923-3 (915 to 918 MHz)
Transmit Power	+20 dBm
Class	Class A

Power Configuration

Power Source	Battery
Battery Type	Li-SOCl ₂
Battery Voltage	3.6 V
Battery Capacity	19,000 mAh

Sensor Performance

Operating Principle	Hydrostatic Pressure
Range	0 m to 5 m
Accuracy ^[1]	±0.025 m
Resolution ^[1]	0.01 m
Stability ^[1]	±0.15 m
Pressure Type	Vented Gauge

General Specifications

Operating Temperature	-20 °C to +70 °C
Relative Humidity	0% RH to 100% RH (non-condensing)
Ingress Protection	Transceiver: IP67 Probe: IP68
Enclosure Material	Transceiver: ABS + PC Plastic Probe: Stainless Steel 304
Dimension	Transceiver: 105.4 mm × 71 mm × 69.5 mm
Weight	0.6 kg (including 5 m cable)
Mounting/Installation	Pole, Wall or DIN Rail Mounting

Approvals

Regulatory	CE, FCC, ICASA, ISED, Telec
Environmental	RoHC

Note
[1] Calibration and testing performed with water (H₂O) as the medium

LoRa Alliance Member

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WE CONNECT THINGS

Packetworx IoT Technology Hub
G/F iSquare Building, 15 Meralco Avenue,
Ortigas, Pasig City, 1605, Philippines