

Senspuck Level Meter - SLM30

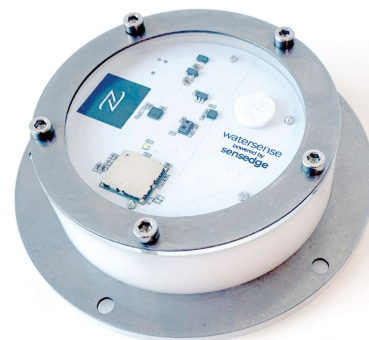
Senspuck is a LoRaWAN level meter sensor. It is designed to operate autonomously for 10 years in outdoor environments. It is suitable for wide variety of applications where reliable and case specific solution is needed. It enables multi-object detection and ignores cover glass smudges and dirt.

Key features

- Level meter
- Motion detection
- NFC configuration
- Multi-object detection
- Application calibrated

Applications

- Silos
- Water tanks
- Drainage pipes
- Waste bins



Technical specification

Enclosure	
Weight	100g w/ batteries / 140 g with batteries
Dimensions	80mm x 30mm
Materials	UV stable plastic, BOM, Plexi
IP rating	IP68
Operating conditions	
Temperature	-40°C to +85°C
Humidity	0 to 100% RH
Power supply	
Battery type	1 x 3.6V AA Lithium
Expected operation	<10 years (depending on sampling, signal, environment)
Configuration	
Sending interval	Configuration via NFC and downlink
Data upload interval	Configuration via NFC and downlink
NFC configuration	Native Android App

Connectivity

Wireless Technology	LoRaWAN® 1.0.3
Wireless Security	LoRaWAN® End-to-End encryption (AES-CTR), Data Integrity Protection (AES-CMAC)
LoRaWAN Device Type	Class A/C (configurable) End-device
Supported regions	US902 –928, EU863 –870, AS923, AU915 –928
Link Budget	137 dB (SF7) to 151 dB (SF12)
RF Transmit Power	14dB / 20 dB (Region specific)

Sensors

Level

Type	Time-of-Flight (ToF) – optical technology	
Range	40mm to 4000mm	
Accuracy	+/-20mm (Depending on light conditions)	
Typical field of view	27° (Depending on distance mode)	
Distance mode	Configurable distance modes: short, medium, long	
Max range by distance mode	Short: 136cm - dark ambient	135cm - strong ambient light
	Medium: 290cm - dark ambient	76cm - strong ambient light
	Long: Up to 400cm - dark ambient	73cm - strong ambient light

Temperature

Range	-40°C to +65°C
Accuracy	±1°C

Acceleration

Range	±2g to ±16g
Accuracy	±40mg