Radar Distance Sensor RDS-100

>ELECTRONIC SOLUTIONS
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GERMANY ®

SAVE ENERGY + ECO | Made in Germany | LoRa®

LoRaWAN® radar level/distance sensor

Indoor and outdoor use (IP 65)

Battery driven

Tool-free battery exchange

Integrated, adjustable LoRa antenna

Configurable via LoRa Downlink

Firmware Update Over The Air

Use cases: Monitoring of brooks, rivers, lakes, channels, tanks, leakages, distance measuring, presence detection, etc.)

Made in Germany

Product Specification

High precision distance measurements with mm accuracy

Housing made of weather-resistant aluminium 6082-T6

Screw cap made of UV-stable high-performance plastic

Sustainable due to modular structure and robust design

All components replacable (e.g. battery, sensor, PCB,...)

Energy saving ultra low power operation 24h/7d

Use of high quality components

Long-term stable premium 60GHz radar sensor

Durable Li-SOCL$_2$ branded battery with LIC for pulse operation

Electronic „Made in Germany" (Hard- and Software)

Integrated On/Off switch for easy commissioning

Display of status and signal level by integrated LED

LoRa Parameters

Class A, OTAA, FUOTA

LoRa 868MHz EU, integrated antenna

adaptive or static data rate configurable

modern, low power micro controller

Secure Key Management Hardware

LoRa version 1.0.4

Dimensions

LxD [mm] 99x50

Weight [kg] 0,3

Modifications and errors reserved

Technical Data

Transmits distance/level, temperature, battery voltage, ...

Different accuracy profiles: 2.7....5.1mm

Measuring distance up to 10m (without optics)

Larger distances up to 20m possible on request

Customized modifications on request

Measuring accuracy temperature: ± 4.5%

Operating temperature: -20...60°C

Battery life time: > 10 years @ 4 samples/day

Scope of delivery

LoRa radar level sensor

Power supply by integrated battery

User manual

JavaScript Payload Formatter

Integration Guide

Optional Features

Customized process connection for tanks

Customized designs & form factors

Customized Firmware

Adjustments for dedicated use cases

external LoRa antenna

LoRa class B implementation

Support with planning, installation, integration, service

Made in Germany