



Use Cases: Manholes / Flows / Overflows / Pipe flow monitoring

Robust. Long-living. Uncompromised data quality.

Smart Radar

A self-contained device that uses a radar pulse to measure the level of water and other liquids without additional probes.

Low maintenance

Battery can last up to 10 years. Configured, operated, and updated over the air.

Built safe and strong

Operation range of -40°C to 85°C, IP69k resistance, safe for potable water environment.

Advanced technology

Built-in accelerometer, GPS location, NB-IoT (Cat. NB1/NB2), LTE Cat. M1, and GPRS.











Smart RADAR

Use Cases: Manholes / Flows / Overflows / Pipe flow monitoring



Smart Alarm features +

Distributed installations localisation

Flow monitoring



Measurement range: up to 9 metres

Connectivity: LTE-M1, NB-IoT, GPRS

Certifications: CE Class-B, RED, RoHS

High-performance ARM® Cortex®

60 GHz Pulsed Coherent Radar (PCR)

Integrated ambient temperature sensor

Built-in storage for 100,000 measurement

Key features:

Lifecycle: up to 9 years

Sensor resolution: 1mm

Protection class: IP69K

Hardware specification:

Integrated accelerometer

Integrated NFC Chip and coil

Operating range: -30 °C to +60 °C

Material: High-density PE

Events and maintenance tracking



Overflow monitoring



Connectivity specification:

- Rel. 14 LTE Cat NB2
- Rel. 14 LTE Cat M1 with CE Mode B
- EDGE, GPRS
- GPS, Cell ID

Hardware specification: Ultra-low power consumption: down to 50 µA deep sleep Includes 40,000 mAh LiMNO2 battery EMI/ESD protected device

Software specification: Zephyr® Industry-Standard Real-Time Operating System (RTOS), Flexible I/O operations, Firmware Upgrade Over-The-Air (FOTA) MQTT Transmission protocol Data Access via Open APIs

Data management and visualisation



Pipe flow monitoring



The Smart Radar sensor is based on a unique patented technology enabling millimetre accuracy with very low power consumption operating in the 60 GHz unlicensed ISM radio band. The Smart Radar provides robust performance. The radar auto-calibrates and can be configured differently to optimise sensor performance in varying use cases and environments.

Depending on environmental conditions, obstacles, and other factors, the radar is capable of detecting distance to planar water surfaces up to 10 meters away.

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Smart ALARM

Use Cases: Septic Tanks / Pumping Stations / Sewage and Water Pools





Smart Hydrant Cap

A 5G replacement for the standard end caps fire hydrants that does much more than keeping water from leaking.

Tampering detection

Thanks to a built-in accelerometer, it detects unauthorized interaction and sends an alert.

Condition monitoring

Sensors detect water pressure, temperature, and humidity changes to prevent failures.

Long-lasting

Rugged high-endurance battery lasts up to 10 years thanks to low-consumption sleep cycles.

Cloud computing and analytics

Thousands of devices. Around-the-clock monitoring. Massive amounts of data. It all requires perfect orchestration of hybrid resources.

Orchestra

Provides secure, automated networking and hybrid cloud resources interconnectivity.

NB-IoT and LTE-M

Data processed by the devices is sent to the cloud using the best available Telco networks.

Secure authentication

Access provided by a single sign on (SSO) solution designed on top of OAuth 2.0.





Online Platform

Total control over the devices in a few clicks. Here you can interact with data insights, reports, get alerts and manage maintenance windows.

Bird's-eye view

Check the status of all devices in few glances and get notified about potential issues.

Mobile application

Workforce can use NFC to interact with devices and log maintenance activities.

Broad range of APIs

Data can be easily injected into existing IT infrastructure or third-party solutions.

Smart ALARM

Use Cases: Septic Tanks / Pumping Stations / Sewage and Water Pools



Basic features +

Distributed installations localisation



Events and maintenance tracking



Incidents management

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Key features:

Measurement range: up to 8 metres Lifecycle: up to 8 years Sensor resolution: 1mm Connectivity: LTE-M1, NB-IoT, GPRS Protection class: IP69K Material: High-density PE Certifications: CE Class-B, RED, RoHS

Hardware specification:

ARM® Cortex® CPU 60 GHz Pulsed Coherent Radar (PCR) Integrated accelerometer Integrated ambient temperature sensor Operating range: -30 °C to +60 °C Built-in storage for 100,000 measurement

Connectivity specification:

- Rel. 14 LTE Cat NB2
- Rel. 14 LTE Cat M1 with CE Mode B
- EDGE, GPRS
- GPS, Cell ID

Hardware specification: Low power consumption: down to 120 µA deep sleep EMI/ESD protected device

Software specification: Zephyr® Industry-Standard Real-Time Operating System (RTOS), Flexible I/O operations, Firmware Upgrade Over-The-Air (FOTA) MQTT Transmission protocol Data Access via Open APIs

Data management and visualisation

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surfaces up to

8 meters away.