

RadarSens LR | Deep Sewer Level Monitoring

RadarSens LR is an intrinsically **Long range sewer level monitoring system (SLM)** that combines **radar sensing technology** for effective monitoring in sewage channels upto a **depth 14 meters**.

RadarSens LR is a radar-based monitoring sensor for **remote measurement of sewer, wastewater and storm water levels**. Installed in a manhole chamber, Radarsens LR measures the challenging **depth or level of sewage/wastewater**.

RadarSens LR is **ATEX Zone 1** certified for use in **hazardous & explosive environments** which may contain inflammable gases.

RadarSens LR is usually integrated with a datalogger for **remote data transmission** of monitored sewage/wastewater levels with **alarms based on rising level thresholds**. The device also monitors temperature, sensor orientation (pitch & roll) & signal intensity which helps **detect blockages and movement**.

RadarSens LR data is monitored through the **Datagate cloud server** at central office, based on which zonal or nodal offices can be notified for maintenance & rectification activities of the **sewage pipelines** and **manholes** in a water or municipal network.



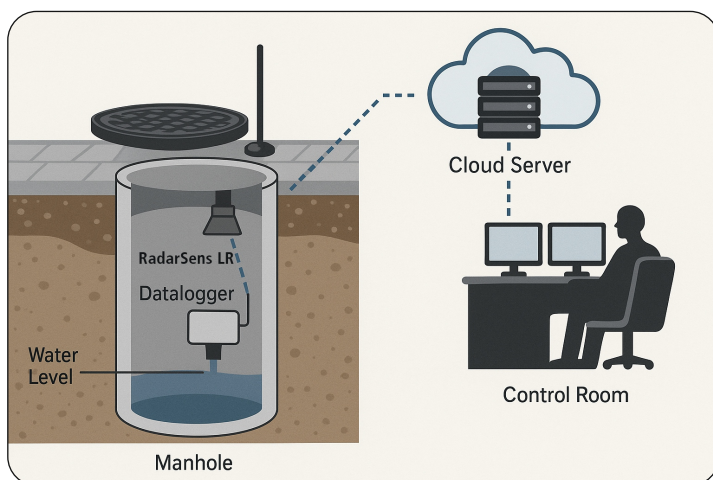
Powered by a long-life battery with up to 5 years of operation

Telemetry for connectivity

Key Features and Benefits

- Use in Deep Sewage Pipes/Manholes: 14m range
- Advanced and cost-effective radar sensor delivers precise data for **long-term network monitoring**
- Intrinsically safe and certified for use in **Zone 1 hazardous areas**
- **Accuracy $\leq 2\text{mm}$ accuracy over a 14m range**
- Local Bluetooth® configuration allows for definitive in-chamber signal strength testing and sensor reflection tracing using the IDT app (Android and iOS)
- **Remote monitoring** of data quality and chamber temperature to confirm if unexpected changes in level trends are related to **third-party activity**
- A range of easy-fit and robust stainless steel wall brackets and non-drill installation brace bars are available
- Typical **5+ year battery life**
- **IP68**, rugged construction and long-life battery
- Compatibility with Installation App to support quick and accurate mass deployment

- Drop-in laser alignment tool to assist installation, ensuring the sensor is positioned correctly (supplied separately)



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Technical Specifications:

Feature	Specification
Rating	UKEx/ATEX/IEC Ex certified to Zone 1
Range	up to 14m
Operating Temp.	-20 to 60°C
Accuracy	≤ 2mm
Antenna (Logger)	Bulgin
Battery (Logger)	Typical 5+ year battery life
Alarms	Multiple threshold, profile with additional diagnostics
Dimensions (HxWxD)	76x37x37mm
Deployment	Drop-in alignment tool (supplied separately)
Ingress Protection	IP68 rated

RadarSens LR is ATEX 1 certified for use in sewers with flammable gases or vapours typical of sewage networks.



Installation Visuals:



Complimentary Devices:

1 Intelligens WW

ATEX Certified Data Logger

Intelligens WW is a truly flexible data logger specifically engineered for the rigours of waste water applications. Intrinsically safe and built for compatibility, the versatile Intelligens logger can be tailored to meet a variety of specific user needs. Built in Telemetry (2G/3G/4G) transmits data to central office through cloud server.

2 HWM Deployment App

Logger Installation Support

The HWM Deployment App is an installation tool that supports the quick and effective deployment of HWM manufactured data loggers. As well as recording installation details, the Deployment App is used to test signal strength during installation.

3 DataGate/DataView

Secure Data Platforms

Our DataGate and DataView platforms provide access to the devices and the data that they gather. DataGate holds a database of all installations and site details, while DataView provides the collected level data as well as the ability to set and view alarms.

