

ULTIMATE NETWORK VISIBILITY, PERFORMANCE AND FORECASTING
 PREVENT WASTEWATER SPILLS, REDUCE POLLUTION
 KEEP THE NATURAL ENVIRONMENT CLEAN AND PROTECTED

ART Sewer is a groundbreaking Wastewater Level Monitoring solution providing users with an all-in-one approach for cost-effective mass deployment of IoT sensing devices across a wastewater network. Combined with smart machine learning data analytics, **ART Sewer** is the first-ever solution to deliver ultimate network visibility, performance and forecasting.

ART Sewer, comprising of four elements, helps wastewater utilities prevent wastewater spills, thereby reducing pollution to keep the natural environment clean and protected.

The **Sense Level** IoT devices use contactless sensor technology to monitor sewer levels and send the data into **Canvas**, Metasphere’s powerful data collection and device management platform.

The data visualisation platform **Palette**, presents this data in a concise manner. From here our data analytics platform, **ART** (Analytical Remote Telemetry) can combine the sewer level data with historic, current, and forecasted rainfall data; to provide real insight including detecting partial sewer blockages.

The solution enables wastewater utilities to proactively manage flow in sewers, pumping stations, manholes and Combined Sewer Overflows (CSOs), detect partial sewer blockages as well as monitor and prevent flooding events.



Benefits

- Ultimate network visibility, performance and forecasting
- Detect partial sewer blockages across the network
- Proactively manage flow in sewers, pumping stations, manholes and CSOs
- Monitor and prevent flooding events
- Helps prevent wastewater spills, reducing pollution to keep the natural environment clean and protected

ART SEWER

SPECIFICATIONS



ART delivers a data analytics and insight platform to proactively manage flow in sewers, pumping stations, manholes, Combined Sewer Overflows (CSOs), detect partial sewer blockages as well as well as monitor and prevent flooding events.

Operational Intelligence

- Smart Machine Learning Data Analytics
- Detect partial sewer blockages
- Monitor and prevent flooding events using sewer level and rainfall data
- Proactively manage flow in sewers, pumping stations, manholes and CSOs



Palette provides a user-friendly data visualisation platform for effective monitoring, reporting and estate management.

Data Visualisation

- Web interface for **Canvas** to easily manage larger estates
- Tailor-made options for varying requirements and specifications
- Traffic light alarm system across all levels and views (Estate, Site, Outstation)
- Linked to Google maps for site location and street view
- Multiple user level access



Canvas, a brand-new data collection and device management platform, provides users with an easy-to-use interface to manage their sensor devices within the field.

Data Collection and Device Management

- Collects data from **Sense Level** devices
- Export data to Metasphere's Analytics Platform, **ART**

My Site: A mobile friendly interface to send information about installed sites directly to **Palette**

- Bulk device management tools
- Estate management
- Remote device management including sample frequency, alarm thresholds etc.



Sense Level, an IoT connected radar level sensor, is a self-contained, low cost fit-and-forget unit for use in harsh environments in remote locations. Its design exploits mainstream technologies to minimise costs and ensure reliability and longevity. Utilising the latest low power technology, together with its multi-band NB-IoT/Cat-M1 capability ensures **Sense Level** has a long service life with significant reduction in Total Cost of Ownership.

Smart Level Sensor

- 60GHz Radar
- 0-3m range (accuracy +/- 0.5%)
- Multi-band NB-IoT/ LTE-M modem
- External antenna
- IP68
- GPS
- ATEX/IECEX Zone 0
- Internal lithium battery; 5- year battery life*
- Remote management: Firmware upgrade & configuration

**Based on 15- minute sampling, once a day dial-in*

FIND OUT MORE!

If you would like to monitor wastewater levels, get in touch to find out how **ART SEWER** can transform your network.



For general enquiries:

METASPHERE LTD

Millfield, Dorking Road,
Tadworth, Surrey KT20 7TD

+44 (0)1737 846 100
info@metasphere.co.uk
www.metasphere.co.uk

For Australasian enquiries:

METASPHERE AUSTRALIA PTY LTD

Terrace 3, 1-7 Napier Street,
North Sydney, NSW 2060

+61 (0)299 567407
info@metasphere.net.au
www.metasphere.net.au