

# USE CASE

## WaterScope IoT Sewage pump shaft monitoring



### WIRELESS DATA COLLECTION SYSTEM WITH ON-LINE MONITORING

A system for monitoring the pumps of sewage transfer shafts, capable of monitoring the operating time and current consumption of built-in pumps and measuring the level of sewage. It continuously monitors the operating status of the hoist and indicates the status of the integrated circuit breaker.

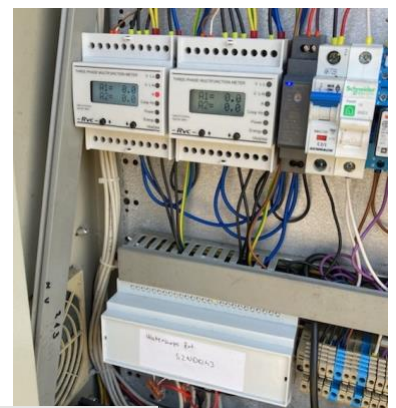
With the optional 2 water sensors, it is able to monitor the water level and send a flood warning when it rises.

The system transmits the measurement data via wireless, LoRaWAN or NB-IoT technology to the cloud server and to the user via the Internet. By processing and analyzing the large amount of data collected in real time about the condition of the equipment, maintenance processes can be optimized, and more efficient use of resources can be achieved. It is possible to coordinate the operation of remote lifts. Thanks to continuous monitoring, operating and maintenance costs can be reduced, and power consumption can be optimized. Preventive maintenance has been replaced by predictive maintenance, the useful life of the equipment is increased, anomaly detection becomes more accurate, major failures and longer costly downtime can be prevented. The probability of failure can be predicted with high accuracy, and the cost of installation is reduced.

If the threshold values defined together with the user are reached / exceeded, the system sends a warning signal / alarm. Furthermore, warnings can be set by trend analysis, ie. the alarm is triggered in the event of an increase in power consumption or an increase in operating time or a decrease in the amount of water supplied, not only when the limit values are reached. Another possibility is to use the data of other lifts operating in the area or to use meteorological data to check the correct operation. Some elements of the monitoring system can be coordinated, the system is able to send warning and alarm signals even on the basis of relative values.



The system automatically generates daily / weekly / monthly reports on the measurement data, which can be exported in xls or csv format according to the user's needs.



### FACTS and DATA

<b>Buyer:</b> Regional Waterworks.	<b>Population:</b> 8000 people
<b>Device:</b> WS IoT SGU-N data collector	<b>Built:</b> 2012
<b>Solution:</b> WS IoT Sewage pump shaft	<b>Monitoring installed:</b> 2021

