

STORMWATER MANAGEMENT

MONITORING, OVERFLOW PREDICTION
AND FLOOD RISK MITIGATION

Prevent floods **before** they happen and keep your systems running smoothly

Ensure public safety and protect property with:

- Detailed monitoring
- Overflow prediction
- Preventive alert and alarm system



GET THERE BEFORE THE FLOOD

The collected data encompasses multiple parameters such as rainfall, rain intensity, humidity and temperature of the surrounding environment, and water level in the soakaway crates and inspection chambers. The system combines real-time weather data and actual water level measurements to predict overflows and maintenance 24/7. The monitoring system enables you to take proactive steps to secure and take care of areas vulnerable to overflows in order to protect people, goods, property and infrastructure. System warnings allow prompt planning activities and avoid damage costs and risks in areas vulnerable to flood damage: parking lots, roads, drinking water collection locations and more. Stormwater monitoring can be used as a measuring point for the whole stormwater system e.g. for controlling the pumping in the Wioniq IQ.



Cabinet



Rain gauge

Level sensor

Rain gauge and temperature sensors can be added to the main solution default set to provide more precise and location-specific weather information.

SYSTEM FUNCTIONS

- Water level and volume monitoring
- Overflow predictions
- Infiltration and attenuation monitoring
- Comparison of real versus predicted amount of inflow
- Monitoring of infiltration rate
- System warnings

Stormbox II

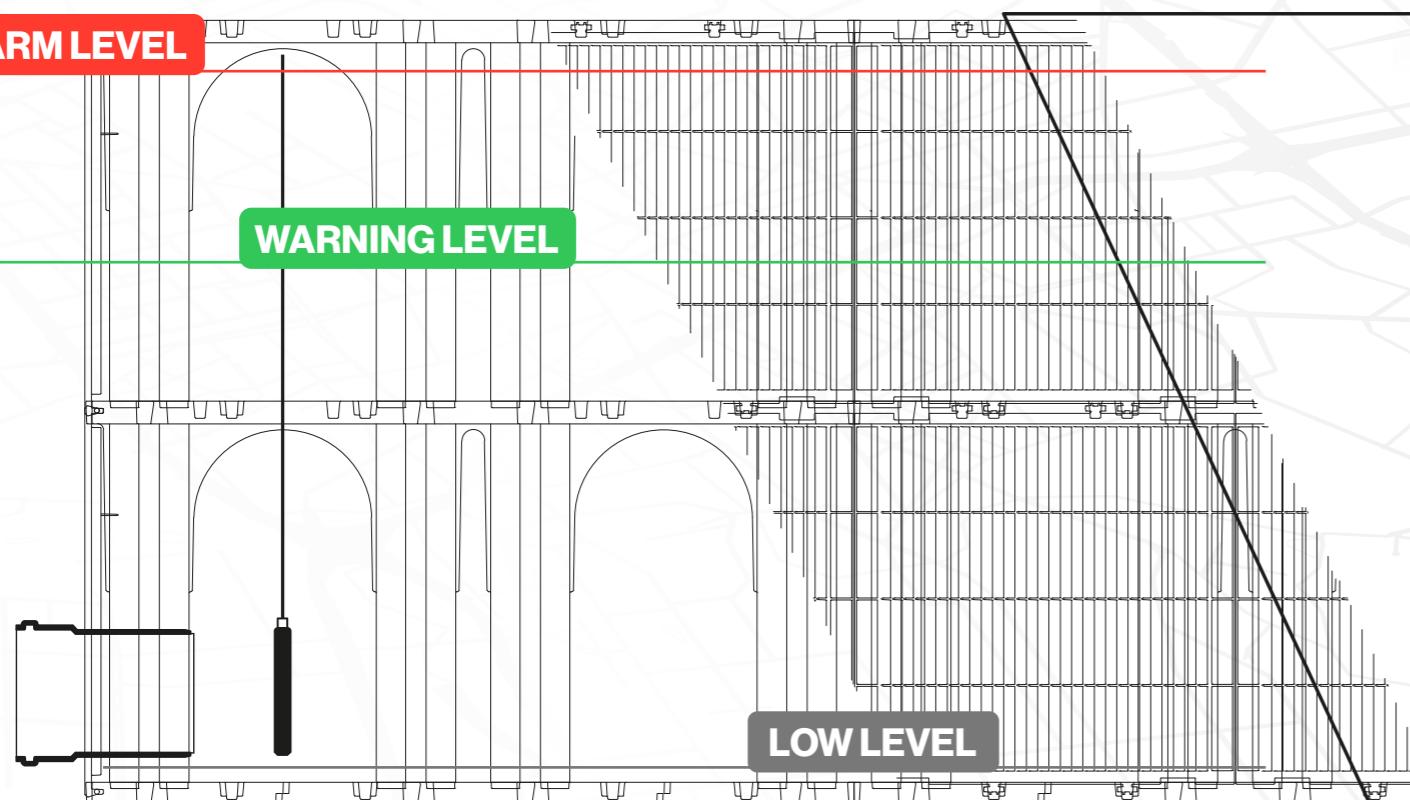
BENEFITS OF INFILTRATION AND ATTENUATION SYSTEM MONITORING

The monitoring system offers a comprehensive view of the stormwater and flood risks in the area. It saves time and reduces expenses on onsite surveying and monitoring of the stormwater system. Additionally, it facilitates easy planning and enables critical proactive steps with tailored system alerts.

- Monitor the water level
 - Compare actual water quantity with predicted water quantity
 - Adapt monitoring and forecasting
- Measure infiltration rates after each shower
- Predict when maintenance is required
- Real-time overflow and flood warning
 - Real-time water level monitoring during precipitation
- Warning two days prior against possible overflows and floods
 - Provides available rainfall forecasts



ALARM LEVEL



WARNING APPLICATIONS

The system can give overflow and flooding warnings based on the rainfall forecast at least two days in advance. The system sends a warning to the chosen contact in case of an overflow or expected overflow.

Case examples

- In the event of tunnel flooding, the system can remotely inform the road operator.
- The administrator may take action to minimize damage by closing a section of the road.
- Drivers can choose alternate routes and avoid the flood.

Service Warnings

Alert settings are set up to specific operator requirements based on their stormwater system, locations, identified risks and relevant thresholds to trigger a specific action sequence remotely or onsite.

EVERYTHING IN ONE PLACE

Wioniq IQ platform brings the system together and allows for a safe, all-integrated access to real-time data.

The secure cloud-based Wioniq IQ is the core that keeps all the information in one place displaying it all in an adaptable dashboard.

Data is communicated via 4G modular rs485 platform to Wioniq IQ cloud service at individually-defined intervals.

All real-time and historical data visuals and monitoring system configuration is available via our platform.

The software enables configurable reports and automated scheduling.



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