

Aqua Storm Control Optimum (Software & Service package) - Powered by

(Item No. G20100)



Typical Applications:

- Flood & Combined Sewer Overflow reduction
- Dry/wet pond water quality improvement
- Rainwater Harvesting
- Hydro modification
- Optimised weather dependent irrigation
- Green roof run-off control and evaporation improvement
- Predictive maintenance and analytics of monitoring data

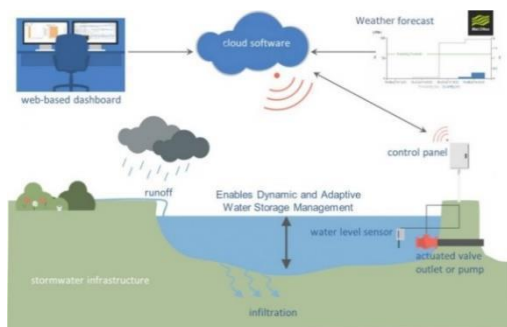
Key Features:

- Automated Operation - Automatically optimises distributed water infrastructure based on site goals and forecasted weather
- Manual Control - Remote, online manual control for overriding automation from a web-Dashboard
- Alarm Systems - With email-based alerting options to notify issues with the deployment
- Distributed Operation - Built to be as effective controlling thousands of distributed sites as it is on a single deployment
- Ability to seamlessly and securely control and monitor all of your sites from a single web interface
- Automated Updates-Fully hosted streaming data processing and control systems –no software to install, configure or maintain
- Data access- 24/7 data access and online visualisation of system operations
- Secure Data - Industry-standard data security and encryption in all data communications

Benefits:

- Enhancing water re-use systems for commercial and multi-occupancy premises
- Control of Sewer Networks prone to [CSO](#) Spills and flooding
- Save or defer major capital expenses on new infrastructure by optimising under-performing drainage infrastructure – e.g. basins or tanks

Functioning Principles:

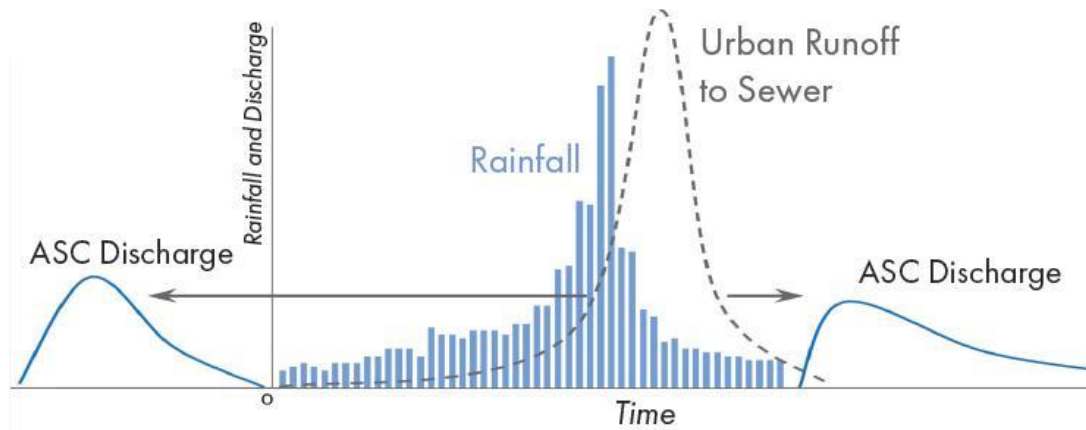


Aqua Storm Control Optimum (ASC Optimum) represents an evolution in storm-water management by harnessing the power of [IoT](#) we can actively manage water to improve water efficiency, reduce flooding and improve water quality.

ASC Optimum is a proven cloud platform for automatic, forecast-based control for storm-water infrastructure.

The system optimises the performance of infrastructure with predictive [real-time controls](#), lowering the cost and risk of managing storm-water.

The system uses weather forecast information to predict the amount of runoff from a rainfall event and prepares the storage system to receive the forecasted water based on site requirements and regulations. The results are significant improvements in the performance of storm-water infrastructure.



Aquality ASC Optimum automatically reads the weather forecast and prepares the system for upcoming storms, ensuring that regulations are met, and the system performs optimally.

Specification Clause:

The forecast-based predictive flow control system shall be Aqua Storm Control Optimum by Aquality Ltd, 6 Wadsworth Rd, Perivale, London. UB6 7JJ. The system shall be connected to the internet through a web gateway capable of accepting a DHCP connection. The system shall be able to automatically control the water level in the tank through operation of a drain valve (e.g. solenoid or motorised ball valve).

The system shall use current weather forecast data and on-site parameters such as water level. The system shall manage water volume through predictive algorithms designed to discharge a proportionate amount of water in advance of forecasted precipitation events. System can accept a 4-20mA or 0-10V analogue signal from a continuous water level measurement device (e.g. pressure sensors) and/or water quality sensors. The system shall be capable of outputting a volt-free contact to BMS system for general fault alarm. The system shall further be capable of accepting a 0-10V digital (pulse) signal from up to two flow meters for tracking of cumulative water usage and discharge from the tank. System failure alarms shall be transmitted to platform for monitoring purposes.

NBS Specification:

The Aqua Storm Control real time flow control should be specified in NBS section R12:315 Below ground drainage systems. Assistance in completing this clause can be found in the Aquality Trading and Consulting Ltd entry in NBS Plus or a model specification can be downloaded from www.aqua-lity.co.uk. For further assistance, please contact the Aquality Engineering Team.

Required hardware for package:

- Control panel & level sensor (Item No. G20101)
- Actuated valve (Item No. G20102)