



**Proud UK  
Manufacturer**

### Product Description

The Stormsaver Duplex Non-Pressurised control unit offers a solution for commercial buildings that have space above ground for a header tank at high, or low level.

The Duplex Non-Pressurised processor is a single enclosed unit that houses the system controls, water meter, solenoid valve and dual auto backwashing filtration to 35 microns.

From the Duplex Non-Pressurised unit the water is filtered in parallel through 2 auto backwash filters which provides a maximum flow rate of 2 l/s, which is then pumped via an airgap that complies with The Water Supply (Water Fittings) Regulations 1999 to a header/break tank that is sized to suit site specific requirements. Water is then gravity fed to points of use. If space is not available at high level then the header tank can be located at ground level and water boosted to points of use via an optional booster set.

In periods of low rainfall the system provides an efficient mainswater top up to the header tank via a type 'AB' airgap (see separate data sheet). Should there be an interruption to the power supply or a problem with the pump/s, the unit will automatically switch over to mainswater. It also comes with a BMS common fault output as standard.

### Pressure Data

Inlet Pressure	3.0 bar
Pressure drop across unit with clean filter	1.5 bar
Discharge pressure with clean filter	1.5 bar
Discharge pressure with 50% blocked filter	1.0 bar
Flow rate with clean filters - Reduces as the filters blind	2.0 l/s

Pressure data can vary depending upon the pump pressure, pipe run lengths, type of pipework, valves and debris within pipes etc.

It is important to understand that as the filters blind the discharge pressure and flow rate of the unit will fall below stated figures.

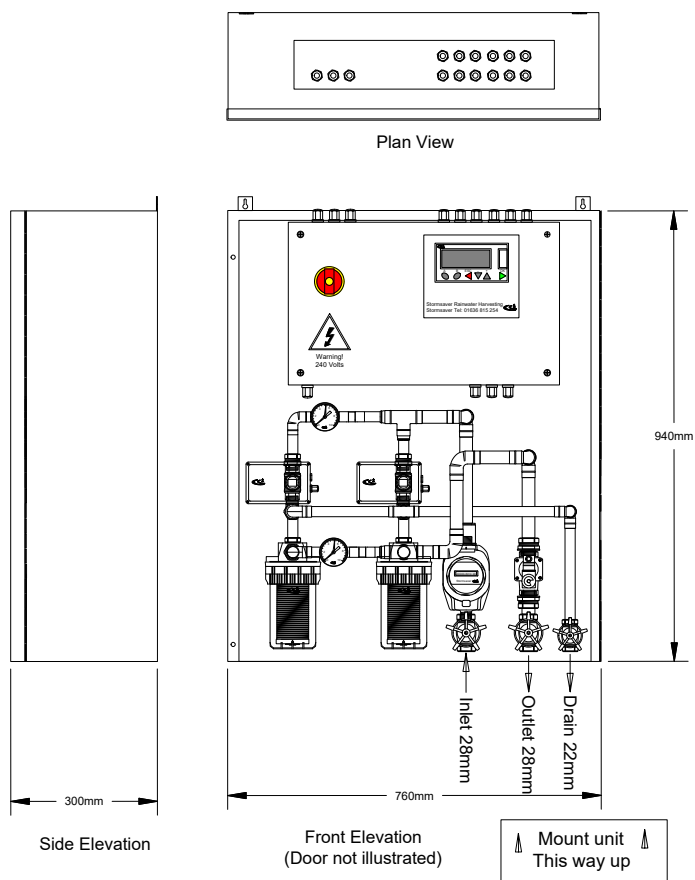
### Technical Details

Colour	RAL 5005 - Blue
Housing Material	Powder coated steel
Power Supply	Requires 230v 20A single phase with Type C20 breaker
Weight	50kg
Dimensions	940mm (H) x 760mm (W) x 300mm (D)
Location	The unit is not weather proof and must <b>NOT</b> be exposed to the elements. Extreme temperatures should also be avoided, so it is not subjected to warming or freezing. For access purposes a minimum of 1000mm is required at the front of the unit to open the door and a minimum of 450mm to each side. 450mm is required above for electrical connections and 250mm below for cleaning, maintenance and connection of pipework.

### Auto backwash Filter Details

The auto backwashing filters are operated by the system controls, which monitors the differential pressure either side of the filters. When a 1 bar pressure drop is detected the first actuator will turn. This allows the pump to run and water to enter via the other actuator, and when this is pressurised it backwashes the first filter, with the waste water going to drain. This process is then repeated with the second actuator, to clean both filters. As soon as the process is complete the second actuator turns back to the filter position and the system will continue to filter rainwater as normal. Each backwash should take no more than 10 seconds. The system will automatically carry out a backwash every 24 hours, even if a pressure drop is not detected to ensure maximum filter efficiency.

### Technical Drawing



Drawing not to scale

### Installation / Location

- The unit is NOT weather proof and must not be exposed to the elements or extremes in temperatures.
- The unit should be wall mounted and so that access can be gained without the use of ladders or scaffolding.
- The units door is hinged from the right hand side
- The unit will need to be located so access can be gained for an electrical supply, rainwater supply, mainswater supply and a drain.
- The drain connection will need to be made into a sealed trapped gully as water will be at pressure.

### Connection Sizes

Component	Description
Rainwater inlet	28mm Inlet pipe - Connects to pipework from the submersible pump/s in the rainwater storage tank
Pressurised outlet	28mm Outlet pipe - Connects to pipework to the header tank and then on to points of use. (An optional booster set is available if the header tank is located at ground level)
Drain	22mm Waste pipe - Connects to drain pipework via a sealed trapped gully

### Optional Extras

Upgrade Option	Details
BMS	- 10% low level (1) - Pump overload (2) - Zero flow/filter blocked (3) - Mainswater meter (4) - Rainwater meter (5) - Pump A run (6) - Pump A fail (7) - Pump B run (8) - Pump B fail (9) - UV monitoring proxima range only (10)
Submersible pumps	- 2 Pumps - Duty/Standby
Booster set	- 2 Pump standalone set - Duty/Standby/Assist