



**Proud UK  
Manufacturer**

### Product Description

The Stormsaver Duplex pressurised unit offers a solution for commercial buildings where space above ground is limited and there is no space for a header tank at high, or low level.

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

From the Duplex pressurised unit the water is filtered in parallel through two auto backwash filters which provides a maximum flow rate of 2 l/s, which will then provide a direct pressurised water supply to points of use.

In periods of low rainfall the system provides an efficient mainswater top up to the rainwater storage tank via a type 'AA' airgap (see separate data sheet). 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.

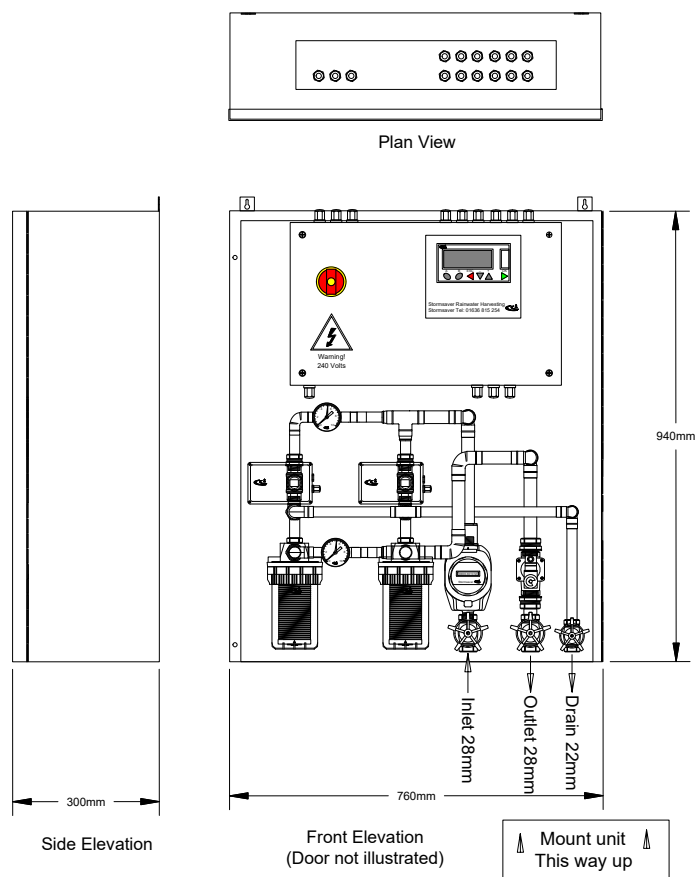
### Technical Details

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 <u>NOT</u> 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 or booster set (Solo system) 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 then 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 or external booster set in a solo system configuration
Pressurised outlet	28mm Outlet pipe - Connects to pipework and on to points of use. (Installing a pressure vessel after the Duplex unit is recommended to extend the life of the submersible pump/s)
Drain	22mm Waste pipe - Connects to drain pipework via a sealed trapped gully

### Optional Extras

Upgrade Option	Details
BMS	<ul style="list-style-type: none"> <li>- 10% low level (1)</li> <li>- Pump overload (2)</li> <li>- Zero flow (3)</li> <li>- Mains water meter (4)</li> <li>- Rainwater meter (5)</li> <li>- Pump A run (6)</li> <li>- Pump A fail (7)</li> <li>- Pump B run (8)</li> <li>- Pump B fail (9)</li> <li>- UV monitoring proxima range only (10)</li> </ul>
Pumps	- 2 Pumps, Duty/Standby