Greywater Irrigation Controller

clonk

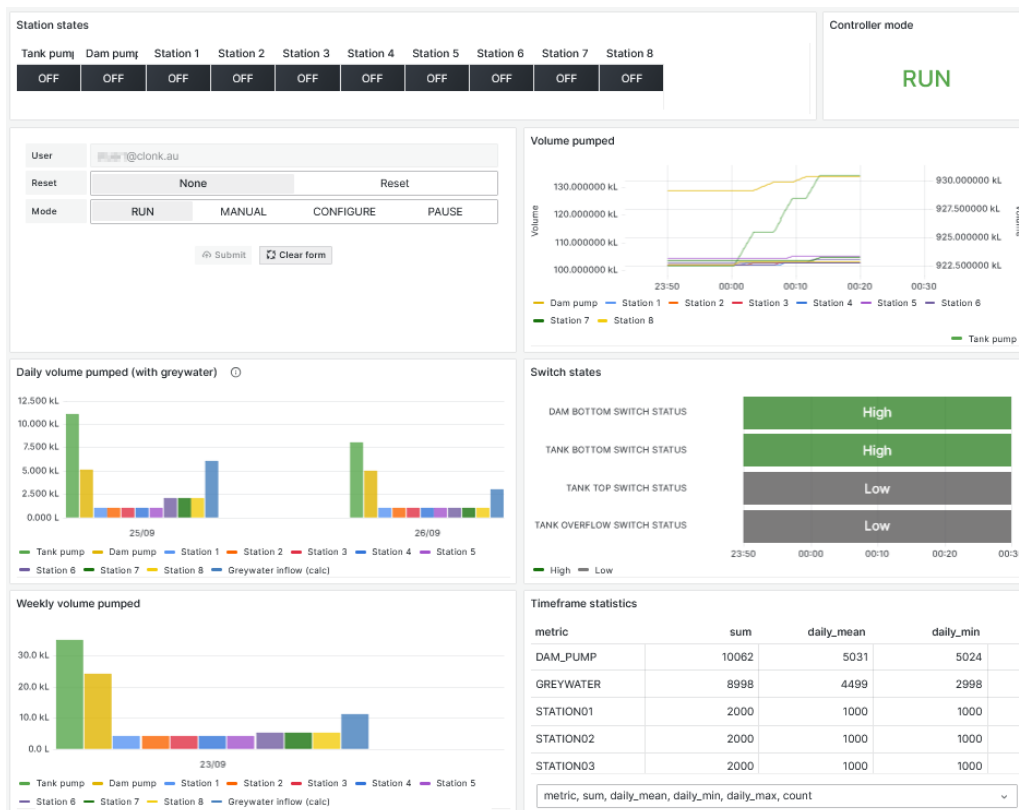## Efficient and Reliable Water Management Solution

Our **Greywater Irrigation Controller** is a simple-to-use system designed to manage the water level in a greywater holding tank. The water is distributed sequentially to 13 stations in such a way that no station ever misses out. In conjunction with our cloud-based web portal, the system provides real-time data and complete remote control.
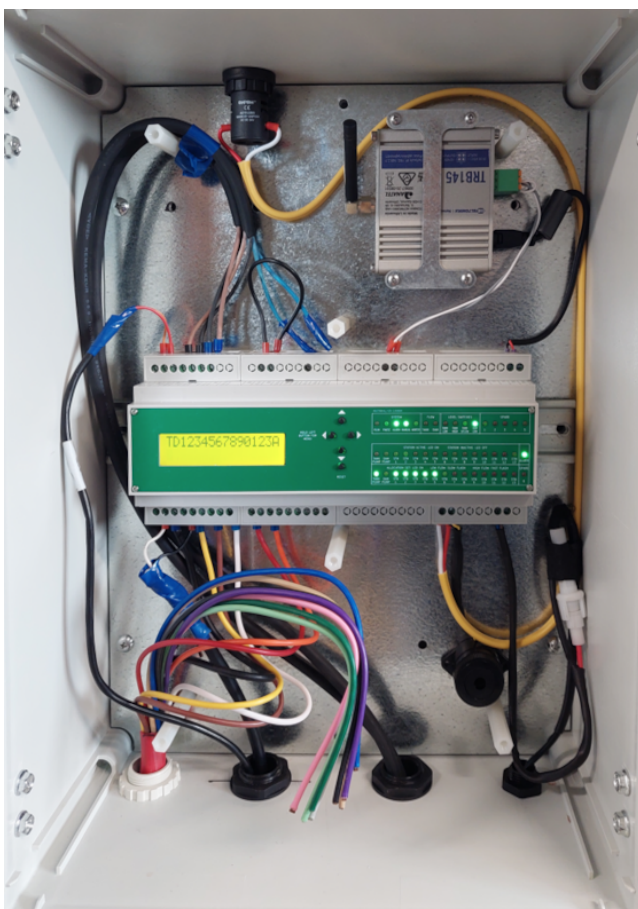
Key Features

- **Two modes:** The controller can be configured in two modes:
  - **Targetted irrigation** volumes for each station with tank top ups from external supply if necessary.
  - **Evenly distributed** irrigation volumes between stations dependent on available supply.
- **Remote Control:** Manage your irrigation system from the web with our mobile-friendly dashboard.
- **Modbus RTU:** Acts as a Modbus slave. Fully documented for integration into a SCADA system.
- **Easy Installation:** DIN form factor for installation into existing cabinets. Also available in an IP68 polycarbonate case with hinged door.
- **Flow rate monitoring:**
  - Prevents pump damage by detecting no-flow conditions.
  - Prevents water wastage by skipping stations with burst pipes (high flow rate).
- **Email alarms:** Customisable email alerts to keep you informed as problems arise.
- **Weather resistant:** Optionally available in a weather resistant housing.
- **Secure:** Data is transmitted over a secure link using mutual TLS certificate based encryption. Customer retains full ownership of data which will be deleted from server on request.

Water meter specifications	
Tank top-up metering	Yes (volume and flow rate)
Irrigation metering	Yes (volume and flow rate)
Greywater inflow metering	No (volume derived on web portal)
Compatible with	Dry reed switch pulse meters
	Arad Octave dual pulse attachment
	Arad Octave pulse + analogue attachment
	iTron Cyble attachment
	Elster/Honeywell PR7 attachment
Maximum pulse rate	20Hz
Minimum pulse duration (on, off)	20ms, 20ms
Volume resolution	1L (meter dependent)

Level switches	
Tank top-up source low level	Yes (eg: dam low level cutout)
Greywater holding tank low level	Yes - prevents running pump dry
Greywater holding tank high level	Yes
Greywater holding tank overflow	Yes - prevents tank top-up and starts irrigation
Compatible with	Dry contact reed switch
Signal	5v, 1mA, 20ms hysterisis
Normally open/closed logic	User configurable

Pump control	
Method	Connect to external motor starter
Output	On:24vAC, Off:0v (maximum 1A)
Tank top-up pump control	Yes (time, volume or target mode)
Irrigation pump control	Yes
Irrigation startup sequence	Station→Master Valve→Pump
Irrigation shutdown sequence	Pump→Master Valve→Station
Pump run-dry protection	Yes, if water meter fitted
Holding tank top-up logic	To conserve water, dam top-up pauses during irrigation ensuring tank capacity is kept available for grey water inflow.
	In targeting mode, the holding tank is fully drained before any water new water is added.

Irrigation stations	
Number of stations	13
Master valve	User configurable, but consumes a station
Output	On:24vAC, Off:0v (maximum 1A)

Manual control	
Via keypad interface	Yes
Via remote interface	Yes
Number of simultaneous stations	Up to 5, including pumps

Alarms	
Hardware alarm	Yes, 24vAC output (fitted to lamp and buzzer by default, but can be repurposed)
Email alerts	Yes, configurable for various fault conditions

Power	
Input	24vAC, 2A
Power consumption	2W (not including modem or solenoids)
Modem power consumption	0.5W (standby), 3.5W (transmit)

Dimensions	
Controller only	212 x 91 x 57mm
Controller in IP68 case	400 x 300 x 180mm (480mm for door clearance)

Dashboard provides access to historical, aggregated and real-time data

Ample space behind escutcheon for wiring.

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