CLEAN WATER

HWM
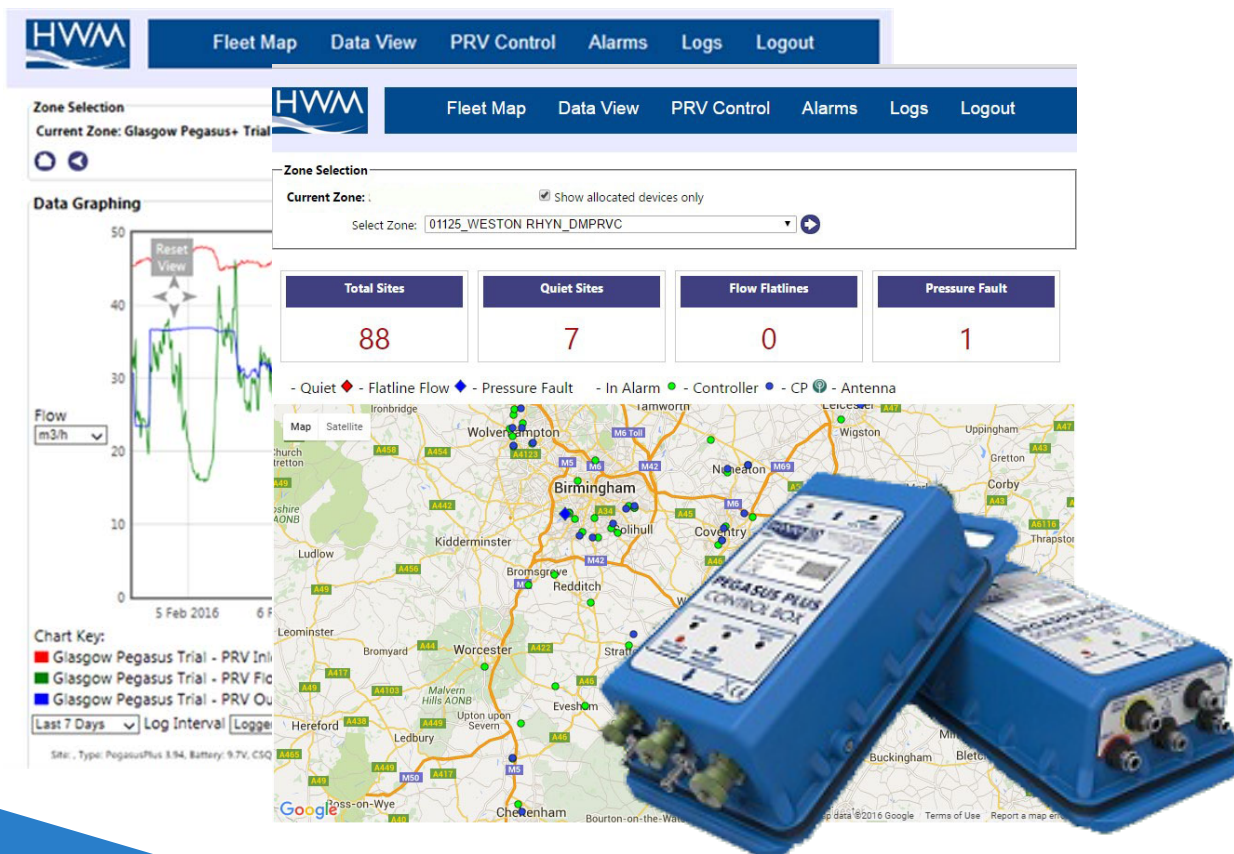
Pegasus+

Modulated Electronic Controller for Pressure Reducing Valves

Key Features

- ✓ Enables intelligent pressure control proven to minimise leakage and reduce the frequency of pipe bursts.
- ✓ Multi point control gives great flexibility to modulate pressure according to demand throughout the day.
- ✓ Allows detailed multi-point time based PRV Control without a flowmeter.
- ✓ Pressure failsafe is set by default to an acceptable output pressure.
- ✓ 3G Version available

- ✓ Latching solenoids can fully open or close the valve against settings in the controller response to extreme or emergency situations.
- ✓ Integrated low cost GPRS telemetry enables almost real-time monitoring and remote control as required.
- ✓ Innovative secondary logging channel enables one second fast logging for analysis of events and transients.
- ✓ Tablet or PC based App allows easy set up and programming functionality.
- ✓ WITS Option

Overview

Pegasus+ is a sophisticated and highly versatile pressure control system with integral 2 way GPRS communications. Key Features include:

- ✓ **Multi-point time based control for profiled control even where a flow meter is not available.**
- ✓ **High performance flow modulation control with multiple table options.**
- ✓ **Full closed loop, self learning automatic control can be enabled if required using data from CP logger and dedicated web software includes multiple CP and time variable CP targets**
- ✓ **Multiple alarm options**
- ✓ **Full 2-way telemetry in all modes**
- ✓ **Full main and secondary channel logging capability**

Modulated Control

In many markets PRV's are installed without an "in line" flowmeter. Pegasus+ features the capability to set target pressures by time, flow or a combination with different table settings per day of the week. This combined with intelligent extrapolation between target points means a sophisticated level of targeted control can be achieved even on a time basis.

Two Way Comms

The latest advances in HWM data logging communication and network connection technology have been incorporated into Pegasus+, which features integral GPRS, GSM, PSTN and SMS.

The bi-directional telemetry can be used to trigger alarms or to change the exact regulated pressure remotely. Firmware can be updated remotely, which helps to make the unit future proof and minimises expensive site visits.

Fast Logging Channel

In addition to its main channel, Pegasus+ features a secondary channel for fast logging down to one second intervals. This is invaluable when a more detailed investigation of events such as pressure spikes and 'true' minimum night flow are required.

Easy Installation

Pegasus+ uses HWM's proven actuator which is easily installed with minimum disruption to the PRV and features mechanical fail safes to ensure pressure even in extreme failure conditions.

Sophistication Software

Pegasus+ uses a Tablet or PC based App for easy set up and programming, and is compatible with the HWM Online web viewer for easy and convenient access to data via the internet. In addition Pegasus+ PC software provides full automatic closed loop operation, including multiple CP's auto-learning, alarm functions and auto updates to 5 minute intervals if required. Closed loop functionality can be used in flow and time based modes. Tables on Pegasus+ software can be set for 96+ values of flow/pressure or time/pressure

REMOTELY MONITOR PRV CONTROLLERS

Input / Outputs	2x Digital input	2x Uni- or bi-directional pulse.
		Count or Event Logging modes
	2x Analogue inputs	Internal Pressure Transducer. 0-20 bar / 0-200 metres head / 0-300 psig, accuracy ±0.1%
		External Pressure Transducer (volt) or Transmitter (mA). 0-20 bar / 0-200 metres head / 0-300 psig, accuracy ±0.1% - Option
		4-20mA from isolated sensor, or 0-1v, 1-5v, or 0-100mVolt. - Option
	3 x Solenoid Outputs	1x Latching Solenoid output , operates top chamber to vent or close
		2x Pulsed Solenoid outputs, up/down control
		Up to 2500 solenoid firings per day, then automatically applied error default, to minimise the risk of depleting batteries unnecessarily
Logging Features	Memory	Primary recording 179,760 readings. (Cyclic or Block).
	Frequency	1 – 59 seconds, 1 – 59 minutes, 1 – 24 hours settings independent for primary and secondary channel.
	Alarms	16 Alarms per logger. Each with 16 character comment field. Can auto dial up to 16 telephone numbers, 1 per alarm. Threshold and profile alarms.
	Logger ID	Up to 8 alphanumeric characters – can be programmed with GIS number. Also readable factory set serial number in firmware.
	Site ID	Up to 127 alphanumeric characters.
	Clock	On board 24 hour real time clock with date facility.
Controlling Features	Summer/Winter	Clock is programmable for seasonal time changes (if applicable)
	Time Based Control	Up to 32 table entries with auto extrapolation in between. On or Off times programmable for the following groups:- 7 individual days per week, Week Days, Weekend, Every Day.
	Flow Based Control	Flow based control , or Flow override option
	Fail Safe	Default Fail Safe can be configured to "Set" or "Release" the latching solenoid upon error (eg faulty sensor / No flow)or revert to time profiles if flow fails or revert to fixed pressure (operator selected).
Communications	GPRS	Can upload data to customer's FTP site or HWMs proprietary UDP mode for low data cost and improved comms reliability in marginal signal areas (requires HWM DataGate connection or HWM software to be installed on customer's system). 3G Compatible modem supporting 850 900 AWS 1700,1900,2100
	Serial	RS232 interface for programming and interrogation with PC/Laptop or PDA/Tablet using Radwin software. Programmable up to 19,200 b.p.s
	PSTN	Optional integral PSTN modem
Physical	Dimensions	2 x 315H x153W x 87H mm
	Construction	Aluminium Alloy Casing
	Weight	Approx 3.5kg (x2)
	Operating temp	-20 to +70°C (-5 to +160°F)
	Ingress protection	IP68 fully submersible
	Power	Lithium-thionyl chloride cell operational for 5 years under typical operating conditions.