CLEAN WATER

# Pegasus 2

## 4G LTE-M & NB-IoT enabled Pressure Control System

Pegasus 2 is an advanced pressure control system that utilizes our innovative modem (capable of connecting via 4G LTE-M/NB-IoT) for reliable and low-powered two-way communication.

With the capability to set target pressure by time, flow or a combination of both (with different table settings per day), Pegasus 2 delivers a sophisticated level of targeted control, even on a time basis.

Pegasus 2 features a secondary channel for fast logging down to 25Hz. This is invaluable for investigating system transient events.


### Key Features and Benefits

- **Wireless:** 4G LTE-M/ NB-IoT cellular communications as standard
- **Modulated control:** provides great flexibility to modulate pressure according to demand throughout the day with changes being made remotely
- **Multi-point time based PRV:** control without flowmeter 96 values per day, 7 days per week
- **Pressure failsafe:** set by user on installation, including manual safe override on site
- **Intelligent pressure control:** proven to minimize leakage and reduce the frequency of pipe bursts
- **Latching solenoids:** optional feature to fully open or close the PRV top chamber in tight headloss, or network fault conditions
- **Integrated low cost communications:** enables rapid monitoring and remote control as required
- **Closed loop control:** optional closed loop control automatically modulating pressure from remote critical point data
- **System configuration:** easy to set up locally via tablet or PC app and remotely via PressView Cloud Server
- **Transient logging:** high speed logging to 25Hz to identify network transient events
- **Value Performance Monitoring:** logging top chamber pressure and solenoid activations to continually monitor value performance

### Applications

Pegasus 2 uses a Windows Tablet or PC based IDT app for easy programming and is compatible with the PressView Cloud for easy and convenient data access and remote configuration.

Pegasus 2 transmits data through an integral modem with 4G NB-IoT and LTE-M (Cat-M1) options available.

In addition, PressView web based software provides location fleet mapping, installation photos, graphing, remote table control, alarm setting and maintenance alerting.

Individual user actions are logged. Any changes made on the operation of Pegasus 2 are logged against the user, making actions fully accountable and historically registered.

MONITORING ASSETS, DELIVERING DATA, BRINGING CONTROL

# Pegasus 2

## 4G LTE-M & NB-IoT enabled Pressure Control System

### Sensor Input Options

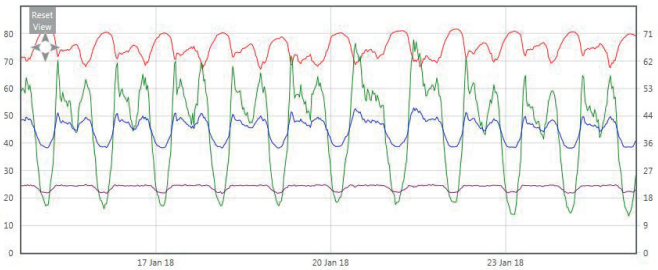
| | |
|---|---|
| 2x Digital | 2x Uni- or bi-directional pulse. Count or Event logging modes |
| 2x Analogue Inputs<br><br>(additional third channel available on request) | Internal Pressure Transducer. External pressure. 4-20mA (optional). 0-20 bar / 0-200 meters head / 0-300psig, 0.1% repeatability / please note that the logger is calibrated to 10 bar as standard. (20 bar calibration must be specified at time of order if required) Leak noise, 0-10V, 0-1V, temperature or 4-20 mA variants |

### Hydraulic

| | |
|---|---|
| 3x Solenoid Outputs | 1x Latching Solenoid, to vent or close the top PRV chamber.<br><br>2x Pulsed Solenoid outputs, up/down control.<br><br>Safe levels and alerts set to protect battery depletion. |

### Communication

| | |
|---|---|
| Mobile | Cellular modem supporting NB-IoT and LTE-M (Cat-1) - contact FCS for available options |
| Serial | RS232 or USB interface for programming and integration with PC/ Laptop or Windows Tablet using IDT software. Programmable up to 19,200 baud |




### Controlling Features

| | |
|---|---|
| Daylight Savings Time | Clock is programmable for seasonal time changes |
| Time Based Control | Up to 96 table entries for 7 individual days per week or setting based on Week Days or Weekends. Calendar special event table also available |
| 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 (e.g faulty sensor/no flow) or revert to time profiles if flow fails or revert to fixed pressure (operator selected) |

### Logger Features

| | |
|---|---|
| Frequency | Variable logger sample rate from 1s to 24hrs (this may affect battery life and communication costs) |
| Logger/Site ID | 7 alphanumeric characters. Readable factory set serial number in firmware |
| Ingress Protection | IP68 fully submersible |
| Dimensions | 315H x 153W x 87D mm (12.4" x 6.0" x 3.4") |
| Construction | Aluminium alloy casing |
| Weight | Approx 7.72lb |
| Operating Temp. | -20 to +60°C (-5 to +140°F) |
| Power | Lithium-thionyl chloride cell operational for 5 years under typical operating conditions |
| Alarms | Multiple alarm options including Rate of Change, Profile, Minimum Night Flow and Threshold. 16 alarms per logger. Can be programmed to auto dial up to 8 telephone numbers on alarm. Over 16 alarms per logger depending on channel configuration |
| Memory | Primary recording 179,760 readings (Cyclic or Block) |



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