

# PEGASUS 2 | LTE-M & NB-IoT-enabled Pressure Control System

Pegasus 2 is an advanced pressure control system that utilises our innovative modem (capable of connecting via LTE-M, NB-IoT, 4G, 3G and 2G) 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

- **Telemetry:** NB-IoT/LTE-M based cellular communication as standard with fallback 2G capability
- **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 minimise 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 telemetry:** 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

## Water Network Flow Logger



- **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

## Datalogging + Telemetry Benefit:

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

Pegasus 2 transmits data through an integral modem with 2G, 3G, 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 and any changes made on the operation of Pegasus 2 are logged against the user, making any actions fully accountable and historically registered.

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## Technical Specifications:

Sensor Input Options	
<b>2X Digital</b>	2x Uni- or bi-directional pulse. Count or Event logging modes
<b>2x Analogue Inputs (additional third channel available onrequest)</b>	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
<b>Hydraulic</b>	
<b>3x Solenoid Outputs</b>	1x Latching Solenoid, to vent or close the top PRV chamber. 2x Pulsed Solenoid outputs, up/down control. Safe levels and alerts set to protect battery depletion.
Communication	
<b>Mobile</b>	Cellular modem supporting 2G/3G/ NBloT/LTE-M (Cat-1) with SMS backup where available - contact for available options
<b>Serial</b>	RS232 or USB interface for programming and integration with PC/Laptop or Windows Tablet using IDT software. Programmable up to 19,200 b.p.s
Controlling Features	
<b>Summer/Winter</b>	Clock is programmable for seasonal time changes
<b>Time Based Control</b>	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
<b>Flow Based Control</b>	Flow based control, or Flow override option
<b>Fail Safe</b>	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	
<b>Frequency</b>	Variable logger sample rate from 1s to 24hrs (this may affect battery life and communication costs)
<b>Logger/Site ID</b>	7 alphanumeric characters. Readable factory set serial number in firmware
<b>Ingress Protection</b>	IP68 fully submersible
<b>Dimensions (HxWxD)</b>	315x153x87mm
<b>Construction</b>	Aluminium alloy casing
<b>Weight</b>	Approx 3.5kg
<b>Operating Temp.</b>	-20° to 60°C
<b>Power</b>	Lithium-thionyl chloride cell operational for 5 years under typical operating conditions
<b>Alarms</b>	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
<b>Memory</b>	Primary recording 179,760 readings (Cyclic or Block)