Regulo PRV Controller

TECHNOLOG

A proven solution for reducing leakage and burst frequency, bringing intelligent cost effective pressure control to your network.

The Regulo is easily connected to most types of Pressure Reducing Valve (PRV), offering multiple control options, remote configuration of downstream pressure profiles and transmission over 2G (SMS/GPRS), NB-IoT and LTE Cat M1 networks.

Key Features

- Provides optimised calmer network pressures

- Prolongs the expected life of a distribution network, reducing capital expenditure

- Flow, time and advanced closed loop control supporting real-time feedback from Cello data loggers installed at critical points

- Integral multi channel data logger

- Remote control profile configuration

- Hydraulic-less control, no filters required, low maintenance

- External battery or externally powered

- Advanced channel profile and threshold alarms

- Remote monitoring and control through web based UtiliCore platform

- Digital transducers enable water and ambient temperature measurement

Technical Specifications

Operating Modes	– Fixed Pressure – Time Profile – Flow Modulation – Closed Loop
Pressure Input	**Input range:** 0-100m, 0-200m; 0-10bar, 0-20bar; 0-150 PSI, 0-300 PSI +/- 0.5% accuracy / resolution
Digital Inputs	– Pulses counted over, and recorded at, preset intervals
Modem	– Support for 2G, NB-IoT and LTE Cat M1 frequencies (subject to build option) – Integral antenna. Supports external antenna
Data Transmission	**Type:** 2G, NB-IoT and LTE Cat M1 frequencies (subject to build option) **Interval:** 1 min to 1 day at programmable
Serial Port	**Type:** Full duplex, asynchronous **Data rate:** 1200, 2400, 4800, 9600, 19200, 38400 bps
Memory	**Size:** 512K, allocatable between channels as required (max 64k per channel) **Type:** Solid state, non-volatile
Clock	**Type:** Crystal controlled calendar clock with leap year adjustment **Accuracy:** 100 seconds per monthly maximum error over operating temperature range **Synchronisation:** Option to synchronise clock to Cellular network
Supply	– User replaceable external battery pack, up to 10 year life (dependant on mode of use) – External 4.5-14V supply
Recording	**Interval:** Programmable between 1 second and 1 hour **Data storage:** Rotating store or store until full – Supports average and statistical recording of pressure (min, max, mean, standard deviation) over logging interval
Alarm Dial-Out	– High/low threshold and profile alarms – Option to update data more frequently after an alarm
Environmental	**Operating ambient temperature:** -20°C to +50°C **Ingress protection classification:** IP68 (submersion at 1m depth for > 7 days)
Mechanical	**Dimensions (mm):** 279/293 (h) x 149 (w) x 100 (d) **Weight:** 2.710kg