i2O™
Intelligent water networks

Pump Optimiser
Precise pumped pressure control and optimisation

OVERVIEW

ACCURATE AND COMPLETE DATA, SECURELY COMMUNICATED

- Optimiser logs flow, manifold pressure and demand setpoint
- Fully configurable to match available analogue signals
- Non-volatile data storage up to a year
- High performance external antenna
- Secure communication on the GPRS network of your choice
- Bluetooth interface for local configuration and commissioning
- Front panel LEDs show status
- Integrates with existing PLC or VSD pump control system
- Standard 2 year warranty, extended warranty available
- External antenna with 5m or 10m cable

LOWEST WHOLE LIFE COST

- Mains powered, no batteries required
- SIM card easily exchanged by user

CONFIGURATION

- Data logging interval: ≥ 1s (15 min default)
- Dial up interval: ≥ 5 min (24 hr default)

PHYSICAL INFORMATION

- Size (mm): W200 x D138 x H123

THE i2O PUMP OPTIMISER

The i2O pump optimiser is part of the advanced pressure management solution. It can be used to remotely control pressure, or automatically optimise at a control point. It operates on variable speed drive, or PLC controlled pumps. The benefits are:

- Reduced energy costs
- Consistent delivery of target pressure for customers
- Extended asset life for pumps and networks
- Reduction in leakage and bursts
- Reduction in operating costs
- ROI is usually less than 1 year

MORE INFO

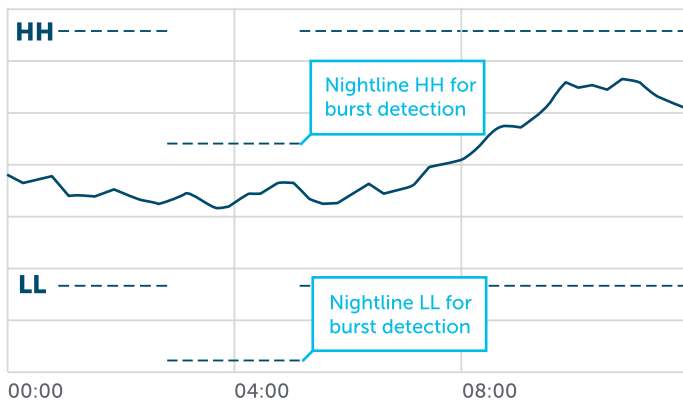Visit **WWW.i2OWATER.COM**

ALARMS

Alarm thresholds can be individually set for each flow and pressure channel. Alarms trigger the following actions:

- Send an SMS and/or an email containing alarm details
- Dial up with increased regularity
- Trigger a dial up

A nightline period can be defined and alternative thresholds can be set for a flow chanel to aid breach and burst detection.

INTERFACES

POWER SUPPLY

- Input voltage: 22-26V DC (24V nominal)
- Input current: 1A maximum

INPUTS & OUTPUTS

- Flow input: 15 bit aggregated flow
- Manifold pressure input
- Pressure demand output
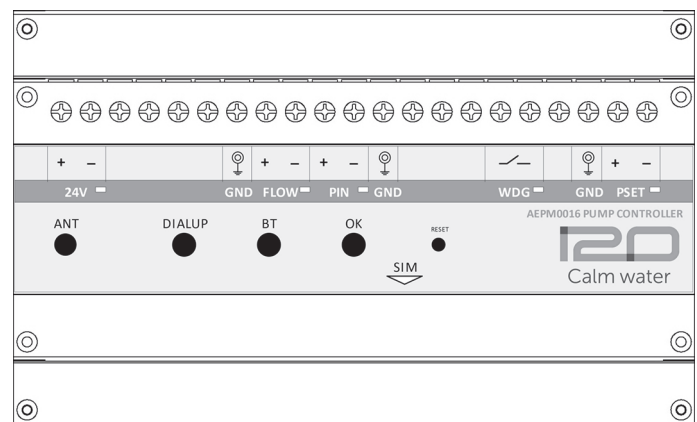- All signals are: Analogue, 4-20mA loops and Opto isolated (floating), 2-wire passive (Type 2)

WATCHDOG (CLOSED CONTACT)

- Energisation: External 6 to 26V DC
- Impedance: ~160Ω
- Max voltage burden: 6V

OVER THE AIR (OTA) INTERFACE

- Network: GSM/GPRS quad-band data and SMS
- SIM: Field replaceable, supports roaming SIMs

INSTALLATION

- Simple analogue signal integration by your ICA team or preferred Systems Integrator
- No data integration required
- Your existing VSD/PLC is configured to provide the pressure requested by the controller
- Pump rate of change, loss of signal, etc. managed by your existing VSD/PLC
- Minimal VSD/PLC configuration required
- Local configuration using i2O Service Application software, connected to controller by Bluetooth
- Set the flow and pressure range to match the flow meter and pressure source
- Set the output range for set point target pressure

DEVICE FRONT VIEW