

A remote telemetry outstation delivering a scalable machine to machine (M2M) solution reducing user operating and capital costs.

Multiple site parameters are monitored, recorded and transmitted over cellular networks, providing a comprehensive multi-application solution for the Utilities and Industry.

Key Features

- Build options for up to two pressure, eight user programmable digital or analogue inputs and two individually switched 12 Volt outputs for powering 4-20mA loops
- Proven bidirectional Cello communication with automatic gap filling ensuring high level data reliability and supporting remote product configuration
- Remote set-up, monitoring and control through locally deployed PMAC software or web based WaterCore platform
- Facilitates closed loop control of pressure reducing valves, pressure sustaining valves and variable speed pumps
- Water temperature measurement
- Advanced channel profile and threshold alarms
- High frequency (100 Hz) pressure transient detection critical to extending asset life and network modelling
- Low power design provides typically > 5 years battery life
- Rugged, portable and waterproof to IP68
- WITS compatible and verified





Technical Specifications

Standard Build Options

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| Inputs | <p>2i - Configurable for up to two digital or analogue inputs</p> <p>1P2i - Configurable for one pressure and up to two digital or analogue inputs</p> <p>2P2i - Configurable for up to two pressure and up to two digital</p> <p>1P7i - Configurable for one pressure and up to seven digital or analogue inputs (on request)</p> <p>8i - Configurable for up to eight digital or analogue inputs; supporting 12v flash powering</p> |
| Pressure Sensors | <p>1P2i, 2P2i & 1P7i options only</p> <p>Input range: 0 - 100 m, 0 - 200 m; 0 - 10 bar, 0 - 20 bar; 0 - 150 psi, 0 - 300 psi</p> <p>Programmable: +/- 0.5% or +/- 0.1% resolution</p> <ul style="list-style-type: none"> - Supports average and statistical recording of pressure (min, max, mean, standard deviation) over logging interval |
| Outputs | <p>8i option only: Two independent digital outputs for external power control and alarm signalling (0 and 3 volt levels, active low, 100k output impedance) or two individually switched 12 Volt outputs for powering 4-20mA loops</p> |

Standard Specification - Common to all Variants

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|--------------------------|--|
| Electrical Inputs | <p>Configurable channel strategies: Voltage, event, tamper / status, count, frequency and encoder</p> <p>Digital: Pulses counted over, and recorded at, pre-set intervals. Tamper/status and event time supported</p> <p>Frequency input: Switch closures or logic pulses, maximum frequency 16 kHz, programmable sampling period</p> <p>Analogue: 0 - 2.5V, 0.01V resolution as standard, <1mV with 8 channel option</p> |
| Modem | <p>Integral antenna: Optional external antenna</p> <ul style="list-style-type: none"> - Support for cellular communication <p>SIM: User replaceable SIM card</p> |
| Data Transmission | <p>Type: Cellular communications</p> <p>Interval: 1 min to 1 month at programmable date and time</p> <ul style="list-style-type: none"> - WITS option (factory configured) |
| Memory | <p>Size: 512K, allocable between channels as required (max 64K per channel)</p> <p>Type: Solid state, non-volatile</p> |
| Clock | <p>Type: Crystal controlled calendar clock with leap year adjustment</p> <ul style="list-style-type: none"> - Option to synchronise clock to local network at regular intervals |
| Supply | <ul style="list-style-type: none"> - User replaceable Internal lithium battery pack, typical battery life > 5 years depending on mode of use - High capacity external lithium battery pack, user replaceable |
| Recording | <p>Interval: Programmable between 1 second and 1 hour</p> <p>Data storage: Rotating store or store until full</p> |
| Alarm Dial-Out | <ul style="list-style-type: none"> - 4 threshold and profile alarms, with hysteresis and persistence, independently configurable on each channel - Option to update data on alarm and more frequently thereafter |
| Environmental | <p>Operating ambient temperature: -20°C to +50°C</p> <p>Ingress protection classification: IP68 (submersion at 1m depth for 24 hours)</p> |
| Mechanical | <p>Dimensions (mm): 149 x 146.5 (h) Weight: 0.750kg</p> |

