

Cello 4S RS485

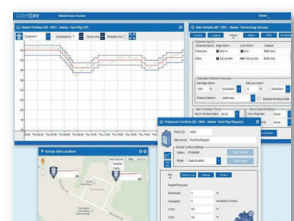


A remote telemetry outstation delivering a scalable and versatile solution for reducing operating and capital costs.

Multiple site parameters are monitored, recorded and transmitted over 2G (SMS/GPRS), NB-IoT and LTE Cat M1 networks, providing a comprehensive multi-application solution for the Utilities and Industry. Use as part of a water quality or flow monitoring system, adaptable for communication with other Modbus sensors.

Key Features

- Flexible communication build options, supporting either 2G / NB-IoT / Cat M1 or NB-IoT / Cat M1 only
- Physical build options include one external pressure sensor and two programmable digital or analogue inputs
- 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 web based WaterCore platform
- Optional water temperature measurement
- High frequency (100 Hz) pressure transient detection critical to extending asset life and network modelling
- Advanced channel profile and threshold alarms
- Low power design. Support for external battery packs and DC supply
- Rugged, portable and waterproof to IP68





Technical Specifications

Standard Build Options

Inputs	RS485 - Support for RS485 only RS485 + 1P - Support for RS485 and one external pressure transducer RS485 + 1P2i - Support for RS485 and one external pressure transducer and two configurable analogue or digital inputs via MIL spec connector + solenoid control
Pressure Sensors	Input range (external): 0 - 100 m, 0 - 200 m; 0 - 10 bar, 0 - 20 bar; 0 - 150 psi, 0 - 300 psi Programmable: +/- 0.5% or +/- 0.1% resolution F.S. – Supports average and statistical recording of pressure (min, max, mean, standard deviation) over logging interval
Sensors	Suitable for a variety of Modbus type sensors including but not limited to digital: – pH, Chlorine, Turbidity, RS485 Flow (e.g. ABB) Meter, Conductivity, ORP, DO and Ammonia (Please contact Technolog for compatibility with other sensor types)
Modem	Integral antenna: Optional external antenna – Support for 2G, NB-IoT and LTE Cat M1 frequencies (subject to build option) SIM: User replaceable SIM card
Data Transmission	Type: 2G, NB-IoT and LTE Cat M1 networks (subject to build option) Interval: 1 min to 1 month at programmable date and time
Memory	Size: 512K, allocable between channels as required (max 64K per channel)
Clock	Type: Crystal controlled calendar clock with leap year adjustment – Option to synchronise clock to local network at regular intervals
Supply	– 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	Interval: Programmable between 1 second and 1 hour Data storage: Rotating store or store until full
Alarm Dial-Out	– Four threshold and profile alarms, independently configurable on each channel – Option to update data on alarm and more frequently thereafter
Environmental	Operating ambient temperature: -20°C to +50°C Ingress protection classification: IP68 (submersion at 1m depth for 48 hours)
Mechanical	Dimensions (mm): 149 x 146.5 (h) Weight: 0.750kg

