## Cello 4H



A multi-application battery powered telemetry outstation for remote monitoring of critical parameters in hazardous environments, providing a super versatile option for pairing with a full range of sensors and applications.

Site parameters and events are monitored, recorded and transmitted over 2G (SMS/GPRS), LTE Cat M1 and NB-IoT networks, providing a comprehensive solution for the utilities and the industry in general.

## **Key Features**

- Support for LTE Cat M1 and NB-IoT with a 2G fallback optional future proofing your assets
- Different build options available supporting all sorts of different applications within hazardous environments including sewers, wastewater and gas distribution networks
- Two powered loops for pairing with suitably I.S. certified and rated 4-20mA HART® enabled sensors allowing a wide range of critical applications
- Two encoder inputs fully compatible with the whole range of Technolog's proven sensors
- Four user configurable digital inputs for allowing different recording strategies
- Bi directional Cello communication supporting automatic gap filling ensuring high level data reliability
- Advanced channel profile and threshold alarms

- Fully certified intrinsically safe for use in explosive atmospheres (ATEX, zone 0)
- Fully compatible with existing WaterCore and GasCore platforms ensuring high levels of data availability and uptime











## **Technical Specifications**

## **Cello 4H specification**

Inputs (subject to build option)	<ul> <li>2 x Inputs compatible with 4-20mA / HART® enabled sensors (single sensor application)</li> <li>2 x Encoder inputs (fully compatible with a full range of Technolog's sensors) – splitter cable required for 2 sensors</li> <li>4 x user configurable digital inputs</li> </ul>
Sensor compatibility	<ul> <li>Fully compatible with current Technolog's Encoded sensors RS-1, AS-1, CSO/CSO V2, Microflow-T &amp; PTI</li> <li>Fully compatible with Siemens LR110 and Vega C21 radar level sensors</li> <li>Suitably I.S. certified and rated 4-20mA sensors</li> </ul>
Modem & SIM	Support for 2G, LTE CAT M1 and NB-IoT technologies and frequencies/bands SIM: User replaceble SIM card
Memory	512K, allocatable between channel as required (max 64K per channel)
Clock	<b>Type:</b> Crystal controlled calendar clock with leap year adjustment – Option to synchronise clock to local network at regular intervals
Power supply options	<ul> <li>User replaceable internal lithium battery pack (2 x internal D cells)</li> <li>External I.S. certified 6 or 12-cell battery packs (optional)</li> <li>Fully compatible with Technolog's Green Energy Module (GEM) for renewable sources (solar/wind)</li> </ul>
Recording	<b>Logging interval:</b> Programmable between 1 second and 1 hour <b>Data storage:</b> Rotating store, or store until full
Alarm Dial-Out	<ul> <li>High/low threshold and profile alarms</li> <li>Option to update data on alarm and more frequently thereafter</li> </ul>
Environmental	Operating temperature: -20°C to +60°C Ingress protection classification: IP68
Intrinsic Safety	Certified Intrinsically Safe: CML 24UKEX2210X CML 24ATEX2209X IECEx CML 24.0074X Ex ia IIC Ga Ambient temperature: Ta = -20°C to +60°C.
Mechanical	<b>Dimensions (mm):</b> 149 x 146.5 (h) <b>Weight:</b> 0.77 kg