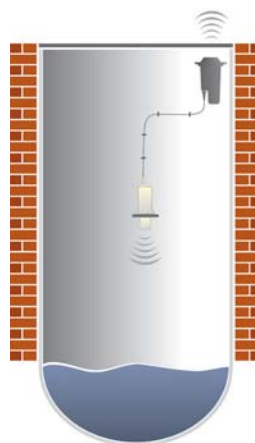


A simple solution providing remote monitoring in hazardous environments, used as an essential aid for temporary & permanent sewer level monitoring, capturing overflow events & early flood warning.

Cello CSO expands on Technolog's family of remote monitoring products, incorporating an ultrasonic level sensor with a battery powered GSM data logger, featuring sophisticated alarm regimes for detecting and immediately alerting of abnormal conditions.

## Key Features

- Simple and easy to install
- Fully certified for explosive atmospheres (ATEX, zone 0)
- Remote data retrieval and configuration through PMAC software or web based, WaterCore platform
- Advanced profile and threshold alarms
- "Data on the web" option
- Internally powered > 5 years
- System housed in a fully waterproof enclosures (IP68 to 1 meter)
- Supports SMS and GPRS modes of communication
- Optional Water Industry Telemetry Standard (WITS) protocol compatible and verified





# Technical Specifications

## CSO Probe specification

<b>Input</b>	Ultrasonic level measurement
<b>Range</b>	0.2 to 3m
<b>Accuracy</b>	+/-10mm
<b>Temperature Sensor</b>	Integrated, for temperature compensation of speed of sound
<b>Beam Angle</b>	12° at -3 dB boundary
<b>Intrinsic Safety</b>	<b>Certified Intrinsically Safe:</b> Sira 12ATEX2007X - Ex ia IIC T4 (Ta = -20 to +60°C) IECEX SIR 12.0001X - Ex ia IIC T4 (Ta = -20 to +60°C)
<b>Environmental</b>	<b>Operating temperature:</b> -20°C to +60°C <b>Ingress protection classification:</b> IP68 (1m / 24 hours)
<b>Mechanical</b>	<b>Dimensions (mm):</b> 217(h) x 82(w) x 88(d)

## Cello I.S. Mk. 2 specification

<b>Modem</b>	<b>Quad band:</b> 900MHz, 1800 MHz / 850MHz, 1900MHz. Integral antenna
<b>Data Transmission</b>	- SMS or GPRS. 15mins, 30mins, 1 hour, 1 day, 1 week or monthly at programmable date and time
<b>Serial Port</b>	<b>Type:</b> Full duplex, asynchronous <b>Data rate:</b> 1200, 2400, 4800, 9600 bps
<b>Memory</b>	<b>Size:</b> 128K, allocatable between channels as required (max 64K per channel)
<b>Clock</b>	<b>Type:</b> Crystal controlled calendar clock with leap year adjustment <b>Accuracy:</b> 100 seconds per month maximum error over operating temperature range <b>Synchronisation:</b> Option to synchronise clock to cellular network
<b>Supply</b>	<b>Life:</b> Typical battery life > 5 years depending on mode of use (15 minute logging rate / daily transmission) - Internally powered by a single internal lithium battery pack
<b>Recording</b>	<b>Interval:</b> Programmable between 1 minute and 1 hour <b>Data storage:</b> Rotating store, or store until full
<b>Alarm Dial-Out</b>	- High/low threshold and profile alarms - Option to update data on alarm and more frequently thereafter
<b>Environmental</b>	<b>Operating temperature:</b> -20°C to +60°C <b>Ingress protection classification:</b> IP68 (1m / 24 hours)
<b>Intrinsic Safety</b>	<b>Certified Intrinsically Safe:</b> SIRA 06ATEX2010X - EEx ia IIC T4 (Ta=-20 to +60°C) or EEx ia IIC T3 (Ta= -20 to +60°C) IECEX SIR 06.0003X - Ex ia IIC T4 (Ta= -20 to +60°C) or Ex ia IIC T3 (Ta= -20 to +60°C)
<b>Mechanical</b>	<b>Dimensions (mm):</b> 205(h) x 140(w) x 150(d)