



# Ultra\_Link

## The ideal CSO solution

*Ultra\_Link* has been developed to provide the ideal flexible solution to the requirement of CSO and sewer monitoring. A partnered product between Churchill controls and Pulsar Process Measurement, *Ultra\_Link* offers the world beating non-contacting ultrasonic level measurement of Pulsar combined with the remote telemetry expertise of Churchill, in a packaged solution

### Difficult Operating Conditions

*Ultra\_Link* uses the Pulsar ultrasonic transducer and DATUM echo processing which are well suited to meet the often difficult operating conditions found within CSO and sewers, coping with chambers cluttered with potentially interfering structures. The transducers are certified to ATEX zone 1 as standard (zone 0 is also available).

### Various Transmission Media

*Ultra\_Link* offers low power radio, leased line, or GSM transmission media to allow reporting to the outside world. Low power radio and leased line can communicate with *Nano\_Link* and *Micro\_Link* base stations. The Basestation can then route data into main telemetry outstations, SCADA or PLC's, for onward transmission if required. The GSM option communicates with a PC and / or a mobile phone. Any mobile phone can be used to receive alarm / current values and send interrogation / configuration messages.

### Real Time Communications and Local Logging

*Ultra\_Link* offers effective real-time reporting of levels, high level alarms, overflows, etc., via low power radio or leased line, with local logging backup giving an invaluable source of uninterrupted data. The local log is adaptive, increasing its logging rate frequency during events / spills. The GSM option offers further logging capacity based on its dial up operation and includes facilities to exception report events such as high level alarms or spills

### Power Supply Options

*Ultra\_Link* can be supplied with various power supply options which include battery (alkaline D cells) giving a minimum of 1 year operation based on a 15 minute outstation poll rate.

### Specification

- **Local Inputs**
  - 4 Digital ( status, alarm or count)
  - 1 Analogue ( non-isolated) 0-20mA
  - 1 Ultrasonic level
- **Communications**
  - Radio: Low power radio STS 300-220-1
  - Leased line: Modem V23 1200 Baud
  - GSM: SMS and data-call
- **GSM Logger**
  - 3000 Analogue readings from each channel
  - 3000 Pulse count readings from each channel
  - 500 Digital events
- **Local Logger**
  - Logging capacity 256KB
  - Adaptive and flexible, increased logging on event.
  - Up to 32000 time stamped events can be logged.
- **Power Supply**
  - 80 to 260 VAC with battery backup
  - Internal alkaline D cells
  - 12 Volt DC
  - 24 Volt DC
  - Solar
- **Transducer**
  - Pulsar dB3 ultrasonic, range 3 Metres complete with 10 Metre cable
  - Max lead length 1000 Metres ( 2 core screened)
  - Certified ATEX Zone 1
  - Minimum blanking distance 125mm
  - DATUM (Digital Adaptive Tracking of Echo Movement) provides reliability in confined tight spaces.
- **Environmental**
  - Enclosure IP67
  - Operating temperature -20 to + 50°C