



The Captis cellular data logger opens up a new world of IoT connectivity and remote data logging

Captis is designed to be small in size, run for extended periods of time on a single battery, and have connection across cellular networks including LTE-M1 and NB1, compatible for use within LTE-M and NBIoT coverage areas

The Captis Pulse Lite is available comes with an Internal LTE antenna, IP68 rated 4 pin plug for sensor connection and is housed in an IP68 rated enclosure.

Use Cases

- Digital Water Metering:
 Domestic, Commercial/Industrial & Multi-Tenancy
- Irrigation Metering
- Sump, Sewer & Drain Levels
- Tank/Silo Level Monitoring
- Dam/Weir Level Monitoring



Captis Pulse Lite

Captis Features

- Cellular connected (LTE-M1, NB1)
- Embedded SIM card
- Remotely configurable: over the air recording interval, offset, scaling, factor, sending interval
- Firmware upgrades over the air (FOTA)
- Sensor Agnostic: connect any off the shelf sensor to the industry standard interfaces and protocols.
- Run all inputs simultaneously
- Able to be installed in-ground (IP68)
- Battery Powered
- Battery life of up to 5,000 Transmissions*
- 5 year product warranty
- o Designed and Manufactured in Australia

Security Features

- Firmware Upgrades
- Over the air firmware downloads over SSL
- AES encrypted firmware image file
- o Data transferred over encrypted connection, SSL/TLS
- Physical device tamper detect
- Non-removable data storage
- Hardware encryption of parameters and credentials

Edge Processing

Alarming/Fast Logging

The kallipr Captis has on board capabilities for handling process alarms and higher resolution logging, based on measured process values. This feature ensures that critical alarm conditions are never missed and users are informed.

Fast Log/Send

The "fast log" feature provides higher resolution data logging based on certain alarm conditions. The Captis will swap the normal log interval and send interval to a second set of higher frequency logging and sending intervals on a configurable alarm value - returning to the normal logging interval and send interval when that state has cleared.

Process Alarms

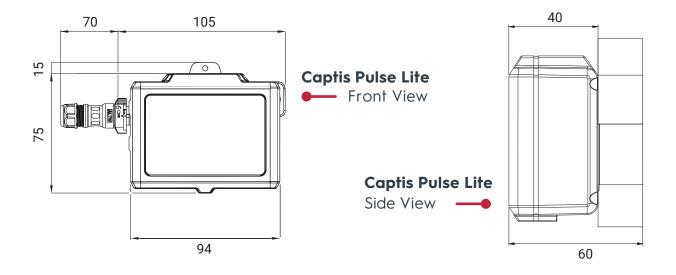
The alarms will trigger based on the process data values at the time of logging, the alarm trigger contains a setpoint and a hysteresis value. The alarming can happen on process values above the setpoint+hysteresis or below setpoint-hysteresis, or on both conditions.

Connection can be made to the client's selected platform on an alarm state, where the SMS and email alert functionality can be actioned.

Cable Cut Loopback Detection

The Captis supports a loopback cable cut detection if required for identifying physical tamper. It is recommended that this is performed as close as possible to the sensor to ensure the cable cut functionality is effective.

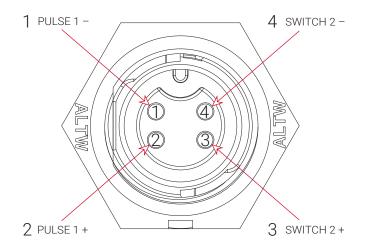
Dimensions



Specifications

Battery Voltage	3.6V
Battery Capacity	19000 mA
Battery Type	"D" Size Non-Rechargeable LiSoCl ₂
Battery Life	Up to 5,000 Transmissions*
Product Warranty	5 year warranty
Pulse/Digital Inputs (2)	Switch & Pulse Modes -0.3v to 3.5v Max Pulse Rate: 1000Hz
Protocols	MQTT, MQTTS
Certification	Rohs, RCM, CE & FCC
Platform Supported	Platform Agnostic
GPS	No
LTE Antenna	Internal
IP Rating	IP68
Log Interval – Min	10 seconds
Send Interval – Min	5 minutes
Operating Temperature	-20°C to 70°C
Unit Dimensions	90 x 75 x 50 mm

Pins & Function



Pin	Function
1	Pulse -
2	Pulse +
3	Switch +
4	Switch -

- Other Considerations Affecting Battery Life:

 Use of multiple sensors and connected power requirements

 Use of multiple sensors can increase data payloads and transmission times

 Higher logging frequencies due to more frequent powering of sensors and larger data payloads

Battery Life of <5,000 Transmissions based on:

- an average signal strength of -96dB (RSRP)

- 15 minute data logging frequency

Normal payload of -20KB





