

CAPTIS METRUM

Digitise your mechanical water meters to accurately detect leaks in your network.

Features

- Cellular connected (LTE-M1, NB1)
- Embedded SIM card
- Remotely configurable (COTA)
- Firmware upgrades over-the-air (FOTA)
- Firmware downloads over SSL
- AES encrypted firmware image file
- Data transferred over encrypted connection (SSL/TLS)
- Physical tamper detection
- Non-removable data storage
- Hardware encryption of parameters and credentials
- Able to be installed in-ground (IP68)
- Battery powered
- 5 year battery life warranty
- Designed and manufactured in Australia

Edge Processing

Alarming/Fast Logging

The Captis Metrum 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 Metrum will swap the default

log and send interval to a second set of high higher frequency logging and sending intervals on a configurable alarm value - returning to the default log 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.

Pulse Pickup Cut Detection

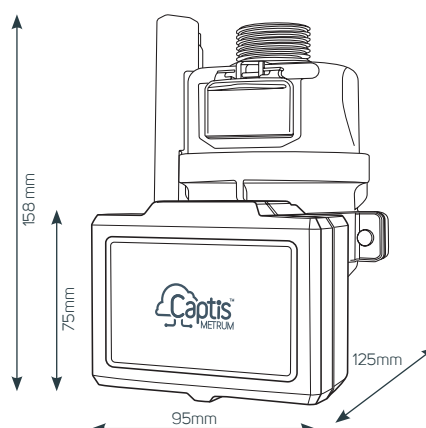
The Captis Metrum has pulse pickup cut detection for identifying physical tampering.



Applications

The Captis Metrum has been developed specifically for all major mechanical water meters in Australia with kits available for the Elster V100, Elster V200 and Itron TD8. Kits for other domestic and international meter types available on request.

DIMENSIONS



SPECIFICATIONS

Battery Voltage	3.6V
Battery Capacity	19000 mA
Battery Type	"D" Size Non-Rechargeable LiSoCl ₂
Battery Life Warranty	5 years / 5,000 transmissions
Product Warranty	2 year warranty
Pulse Inputs	-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	158 x 95 x 125 mm (HxWxD) Device only 75 x 95 x 50 mm

* Battery life of <5,000 transmissions based on; an average signal strength of -96dB (RSRP), 15 minute data logging frequency, normal payload of ~ 20KB. 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.