CAPTIS | PULSE+
by kallipr. | S2

Captis S2 Pulse +

Enhance your monitoring with Captis S2 Pulse+, featuring Modbus functionality tailored for Kallipr Radar Sensor and integration with other self-powered Modbus sensors.

FEATURES

- Swift in-field battery replacement under 30 seconds
- Multiple battery sizes, up to 20 years life
- Dual SIM and eSIM for uninterrupted global connectivity
- Cellular (CAT-M1 and NB-IoT)
- On-device edge computing and AI ready for efficient operations
- MQTT/MQTTS protocol for efficient data transmission
- IP68 rating for extreme durability and water resistance
- Elliptic curve and public key cryptography security
- Kallipr's smart sensor cable for easy configuration
- User-friendly device management via Kallipr Kloud
- Robust authentication with X.509 certificates
- Tamper-Proof security features
- Onboard data storage up to 400,000 samples
- Encrypted firmware upgrades over-the-air (FOTA)
- Encrypted configuration over-the-air (COTA)
- Designed and manufactured in Australia

Swift Battery Swap Technology

Our groundbreaking quick-swap battery system enables ultra-fast battery replacements in less than 30 seconds, significantly enhancing operational uptime and productivity. This feature, combined with eco-friendly recycling protocols and a variety of battery sizes, ensures devices can last up to 20 years, making it a sustainable choice for future-forward operations.

Enhanced Encryption and Security Protocols

Leverage unparalleled data security with our advanced encryption methods, utilizing Elliptic Curve Cryptography (ECC) and Public Key Cryptography (PKC). These robust security measures are complemented by X.509 certificate-based authentication and tamper-proof features, offering comprehensive protection for sensitive data against unauthorized access and cyber threats.

Cutting-Edge On-Device AI Processing

Embrace the future of intelligent operations with our cutting-edge AI ready technology, designed for efficient on-device data processing and data storage. This approach reduces reliance on cloud resources, enabling more responsive and adaptive device behavior, and supports real-time decision-making capabilities. It's a game-changer for businesses seeking to optimize their operations through smart, autonomous systems.

AUSTRALIAN MADE

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SPECIFICATIONS

Data and Software	
Operating System	RTOS
Device Memory	400,000 samples
Edge Logic Alarms	Up to 10
Cyber-security	TLS 1.2
Software Platform	Kallipr Kloud
Data Export Options	CSV, Restful API

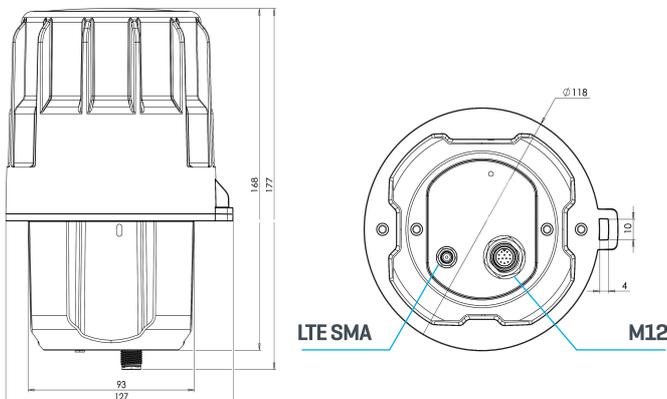| Connectivity	
Cellular	LTE CAT-M1, NB-IoT
Protocols	MQTT, MQTTS
SIM Cards	Dual SIM support
Configuration	Remotely (Over-the-air), NFC
Transmission Interval (Min)	1 minute
Antenna[1]	Built-in internal antenna, external antenna (optional)

Power	
Power Source[2]	Field-replaceable battery, solar cell or DC power
Battery Life[3]	Up to 20 years
Supply Voltage[4][5]	5-24VDC, 1A

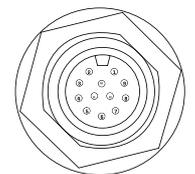| Sensors	
Digital Inputs (up to 3)[5]	Active / Passive Switch and Pulse Modes: -24V to 24V Minimum Pulse Width: 3 msecs
Serial Interfaces[5]	RS485, Modbus RTU
Logging Interval (Min)[6]	10 seconds

Mechanical	
Dimensions (W x H x D)	102mm x 192mm x 132mm (4.02" x 7.56" x 5.20")
Unit Weight	0.642kg (1.42 lbs)
Connectors	M12, LTE SMA
Internal Sensors	Accelerometer, Temperature
Ingress Protection	IP68, 5m for 14 days
Operating Temperature	-20°C to +70°C (-4°F to +158°F)
Storage Temperature	Below 30°C (86°F)

Certifications & Warranty	
Certifications	RoHS, RCM, CE, FCC, PTCRB, ISED
Warranty	2 years (optional 3-year extension)

DIMENSIONS

168 / 177
93
127
Ø118
10
4
LTE SMA
M12

PINS & FUNCTIONS

PIN FUNCTION

1	N/C (Do not connect)	7	Digital Input 2
2	N/C (Do not connect)	8	Digital Input 3
3	Sensor auto recognition	9	Ground
4	N/C		10 Cable Cut Detection
5	Ground		11 Serial A - Modbus RS485
6	Digital Input 1		12 Serial B - Modbus RS485

1 LTE external antenna accessories sold separately.
2 Captis S2 devices are compatible with all Captis S2 battery variants.
3 Battery life depends on the selected battery cell, logging/transmission frequency, and operating conditions.
4 Supply voltage applies only when the Captis S2 rechargeable battery pack is connected.
5 Any sensors or external power supplies intended for connection to the Captis S2 device must be reviewed and approved by Kallipr for compatibility before use.
6 In Switch mode, the log interval triggered by an external signal is limited to 10 seconds. This depends on the solution configuration and requires Kallipr's review and approval.