



LocoTag C2PL



Product Highlights.

- Small, covert and easy to install
- Long battery life of up to 12 months
- Temperature & humidity logging every 15 minutes
- Logs thermocouple (type T) temperatures from -270°C to 400°C
- Reports device orientation
- Reports every 2.4 seconds
- Up to 80m range
- Uses proprietary protocol over 2.4GHz

How the system works.

The LocoTag C2PL has been developed to work alongside SystemLoco tracking and monitoring devices. The LocoTag C2PL can accurately log thermocouple readings and communicate these readings to LocoAware via LocoTrack devices. The LocoTag C2PL stores temperature and humidity readings to local memory. When in range of a LocoTrack device, the data is read and communicated to our LocoServer for storage, visualisation and analysis.

LocoAware enables you to view historical data and easily configure system level behaviour based upon events such as C2PL temperature values for different business needs. The same controls are accessible to 3rd party applications via JSON API to the Loco server.

Activation and asset association.

Activation is completed by a long button press (2 seconds). The red LED will remain on for 2 seconds to indicate successful activation. Once the LocoTag C2PL is activated, it will remain on until removal of power (battery is depleted or removed).

Association is completed by scanning the barcode on the device label and entering details regarding the asset into LocoAware.

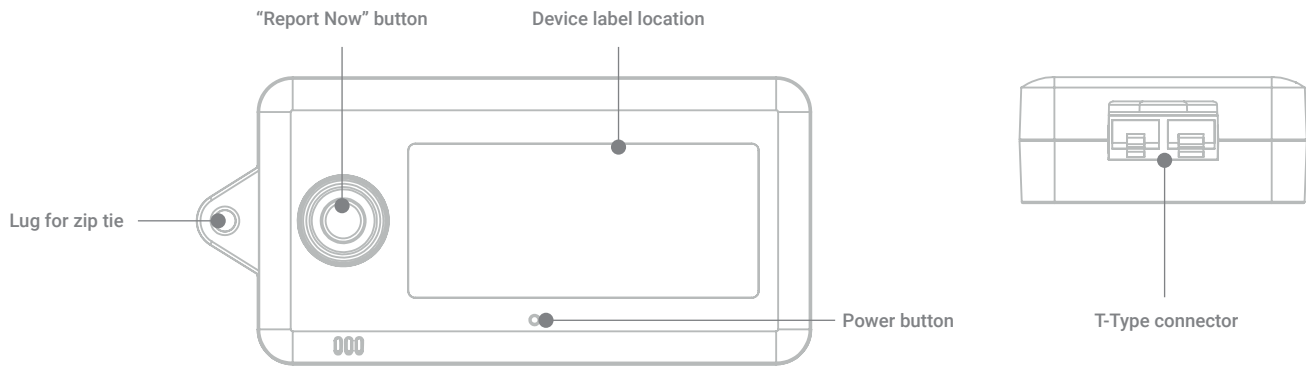
Design considerations.

The system has been developed with end to end security in mind and protection against replay and masquerade attacks.

Each LocoTag C2PL has a unique key programmed at manufacture and all communication is authenticated and restricted to Loco servers. Communication can be completed over cellular or via pre-configured WiFi access points.



Technical Specifications.



Communication

Secure, authenticated proprietary protocol over 2.4 GHz BLE.

Positioning

Loco Hybrid Positioning Engine, with locations from A-GPS, visible cell towers and WiFi access points (from nearby LocoTrack devices)

Reporting

Range	20m (indoors) 80m (outdoors)
Number of tags	Up to 2,000 tags per LocoTrack device
Reporting level	Factory configurable
Log Size	1 month of temperature & humidity

Power Consumption

Sleep	0.005 mA
Reporting	12 mA for 1ms

Mechanical Charecteristics

Dimensions (LxWxH)	88 x 41 x 19 mm
Weight	65 gr
Material	PC+ABS
Colour	Black

Battery

3x AAA Alkaline Batteries	4.5V, 1A
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Environmental

IP rating	N/A
Storage temperature	-10 to 55°C
Operating temperature	-10 to 55°C

Sensors

Device Temperature	Accuracy of sub 1°C (-10 to +125°C) NIST traceable
Thermocouple Temperature	T-Type Connector (-270°C to 400°C)
Device Humidity	Sub 2% RH accuracy
Accelorometer	Orientation relative to an orthogonal coordinate frame

Certifications

ROHS, CE, FCC, IC