



LocoTags (E4BL, P4P, P4B, E4P, E4B)



Product Highlights.

- Small, covert and easy to install
- Long battery life of up to 5 years
- Reports every 5 or 10 seconds
- Logs every 15 minutes (E4BL)
- Up to 80m range
- Uses proprietary protocol over 2.4 GHz
- Sensor options include temperature and humidity

Applications include.

Asset & personnel management:

Proximity LocoTags have been designed to make finding people or assets easy. With a network of LocoTrack devices, assets or personnel can be found instantly. They provide a simple to use, low cost and practical solution for securing and locating equipment and personnel.

Building management:

By using sensor-enabled LocoTags, it is possible to monitor the temperature and humidity of areas in a building in real-time.

Supply chain monitoring:

Our logging LocoTags provide reliable, detailed and complete temperature and humidity traces for goods in transit at very low cost.

Installation and asset association.

Installation is simple. The LocoTag has a 3M adhesive backing which provides a strong attachment to plastic and metal surfaces.

Each LocoTag has a unique identifier that is presented as a number and a barcode on its label. Association is completed by scanning this barcode and entering details regarding the asset. This can be completed directly on LocoAware. Once associated, LocoAware allows the user to search for a type of asset or a specific asset.

Design considerations.

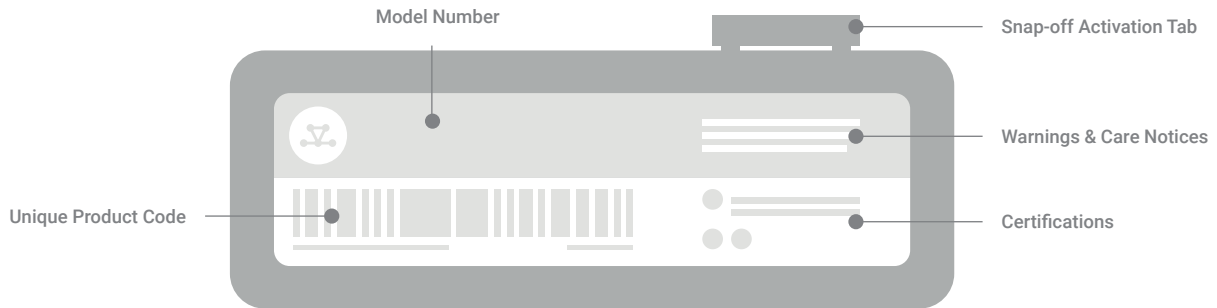
The system has been developed with end-to-end security in mind and protection against replay and masquerade attacks are provided as standard. Each LocoTag has a unique key programmed at manufacture and all communication is authenticated.

How the system works.

LocoTags have been developed to work alongside the SystemLoco tracking and surveillance devices. The LocoTags can report presence/absence as well as alert notifications (temperature/humidity) to LocoAware via LocoTrack devices. LocoAware enables you to view the location and alert notifications and easily configure system level behaviour based upon events such as LocoTag presence/absence for different business needs. The logging LocoTag checks and stores temperature and humidity every 15 minutes to local memory.



Technical Specifications.



Communication

Secure, authenticated proprietary protocol over 2.4 GHz.
BLE discoverable by smartphones and other devices.

Sensing Capabilities

Sensing capabilities are optional, and based upon their configuration may significantly reduce battery life.

Temperature	Accuracy of sub 1°C NIST traceable
Humidity	sub 2% RH accuracy

LocoTag Reporting

Range	20m (indoors) 80m (outdoors / LOS)
Number of tags	Up to 2,000 tags per LocoTrack device
Reporting interval	~10 seconds
Logging	15 minute frequency / 30 days buffer

Power Consumption

Sleep	0.0001 mA (average)
Reporting	12 mA (average)
Reporting period	sub 1ms

Environmental

IP rating	Varies depending on model
Storage temperature	-30 to 60°C
Operating temperature	-25 to 60°C

Battery

320mAh primary battery (2xCR2025, total 0.1g lithium), providing up to 5 years of proximity reporting

Mechanical Characteristics

Dimensions (LxWxH)	72x34x4 mm
Weight	15 gr
Material	PC+ABS (recyclable casing)
Colour	Black

Part Numbers

E4BL	Proximity, temperature, humidity and logging
P4P, P4B	Proximity
E4P, E4B,	Proximity, temperature and humidity
Works with	LocoTrack Devices, LocoHub Z1U, LocoSolver, LocoGateway

Model	Indicative Battery Life
E4BL	Up to 9 months
P4P	Up to 5 years
P4B	Up to 1 year
E4P	Up to 5 years
E4B	Up to 1 year

Certifications

CE, ROHS, FCC, IC, MIC, etc.