LocoTrack Rechargeable HGR4



Overview

The LocoTrack Rechargeable HGR4 is built for supply chain applications, providing location reporting and monitoring key metrics like temperature, light, movement, and impact. It regularly uploads logs and sends instant alerts if sensors exceed configurable thresholds. Sensors are monitored every 10 seconds, and the device can be remotely configured for various industries or specific needs.

In addition to providing standalone protection, the LocoTrack HGR4 is interoperable with other System Loco products. As such, it can read data from LocoTags, and act as a gateway to communicate tag data.

Applications

Globally certified and ideal for tracking shipments across industries such as dry goods, food and beverage, pharmaceuticals, and high-value goods, where sensor data integrity, immutability, and multimodal logging (ocean, rail, air, road) are essential.

Product Highlights

- Easy to install, and pre-configured for use
- Provides 40 days of battery life at 15 minute reporting intervals
- Works indoors & outdoors
- Qi wireless charging
- Environmental sensing (temperature)
- Movement and impact detection
- Package open/close detection
- Secure, authenticated communications: LTE Cat M1, GSM, Wi-Fi
- Secure gateway to communicate with LocoTags
- Certified for use globally and on major airlines
- Certified for use within cold chain

Remote Communication

Worldwide LTE Cat M1 (1, 2, 3, 4, 5, 8, 20, 28)
EGPRS (850, 900, 1800, 1900MHz)
Wi-Fi 802.11b/g/n via Espressif ESP8266
Secure encrypted proprietary BLE-based wireless protocol (2.4GHz)*

Positioning

Loco Hybrid Positioning Engine, with locations from A-GPS, visible cell towers and Wi-Fi access points

Battery

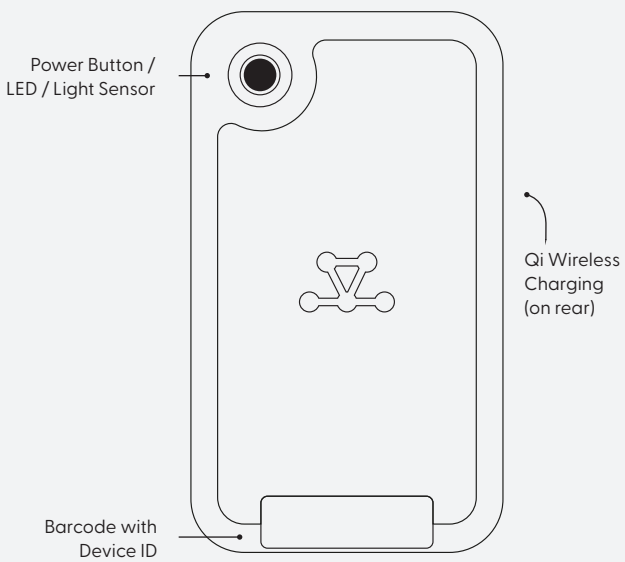
Rechargeable 4 Ah lithium polymer battery providing up to 80 days of continuous operation when using the following configuration:

1 hr reporting interval when stationary | 15 min when in motion (8 hr motion per day)
5 min temperature logging | 10 sec temperature monitoring

Power Consumption

Sleep
0.015 mA (average)

Reporting
115 mA (average)



Mechanical Characteristics

Dimensions (LxWxH)
142 x 82 x 16.5mm
(5.59 x 3.23 x 0.65in)

Weight
168g (5.93oz)

Material
PC+ABS

Color
Black

Environmental

IP rating
IP55

Storage temperature
-10 to 40°C (14 to 104°F)

Operating temperature
-10 to 50°C (14 to 122°F)

Charging temperature
0 to 50°C (32 to 122°F)

Sensors

Temperature
<1°C (2°F) accuracy from
-10 to 65°C (14 to 149°F)
NIST traceable

Accelerometer
Orientation detection
Motion detection
Impact detection
Tip detection

Air pressure
Flight mode

Light
Package open/close

Reporting

Tag detection range
Up to 20 m (65 ft) indoors
Up to 80 m (260 ft) outdoors

Number of tags
Up to 1,000 tags per device

Reporting frequency
Configurable

Compatibility

LocoTrack devices
LTP-HGD4 | LTP-HGD4-SC | LTP-HGP4 | LTP-HGC4 | LTR-HGR4 | LTR-HFR4 | LT-Z1U

LocoTags
LocoCard E1BL | LocoTag E4BL | LocoTag E4B | LocoTag P4B | LocoTag E4P | LocoTag P4P | LocoTag T1B | LocoTag C2PL

Certifications
System Loco devices are certified for use in a wide range of countries and on most major airlines

*Uses a proprietary low-energy protocol over Bluetooth radio technology. Not intended for interoperability with standard Bluetooth devices.