LocoTrack Rechargeable HFR4.

Product Highlights.

→ Easy to install, and pre-configured for use

→ Works indoors & outdoors

→ Splashproof

→ Mains charging with backup battery for power interruptions

→ Loco - localisation/reporting engine, enabling unit to be configured & controlled remotely

→ Environmental sensors for temperature, light & movement

→ Secure, authenticated communications: LTE Cat-M1, GSM, WiFi

→ Secure BLE Gateway to communicate with LocoTags and other LocoTrack devices

→ Perfect for inbound and outbound facility communication with the LocoTag E4BL

→ Certified for use in over 50 countries

How the system works.

The LocoTrack Rechargeable HFR4 is a mains charged device, designed for onsite applications. In addition to providing readings (environmental and location), the LocoTrack Rechargeable HFR4 acts as a hub for LocoTag and LocoTrack devices, Up to 1,000 LocoTags such as the E4BL will transmit data through a hub when they come into range.

If a LocoTrack Rechargeable HFR4 loses connection to it's power source, it can continue to operate for up to 48hrs. Upon reconnection to a power source, it will recharge it's internal backup battery.

Installation and asset association.

The LocoTrack HFR4 is provided pre-configured with default settings. All that is required is to attach the device to a wall, provide mains power and turn on the device. The HFR4 is a component in our asset tracking system, LocoAware.

LocoTags will be detected by the HFR4, reporting the location and condition of each LocoTag that it gets data from.

Design considerations.

The system has been developed with end-to-end security in mind and protection against replay and masquerade attacks is provided as standard. Each LocoTrack HFR4 device has a unique key programmed at manufacture and all communication is authenticated and restricted to the Loco servers. Communications can be completed over the cellular networks or via pre-configured WiFi access points.

The LocoTrack HFR4 devices are powered by Loco – a hybrid GSM, Wi-Fi location engine, which enables indoor and outdoor operation whilst minimising power consumption.

Applications include.

The LocoTrack HFR4 is perfect for asset tracking applications both indoors and outdoors. Reporting the location of assets with a LocoTag device attached.

In supply chain applications, the LocoTrack HFR4 is perfect for automatically and wirelessly reporting back journey logs of LocoTag E4BL, allowing seamless reporting and journey assurance for refrigerated cold chain, dry goods and pharmaceutical shipping.

Technical Specifications.

Remote Communication

Worldwide LTE Cat M1 (1, 2, 3, 4, 5, 8, 20, 28)/EGPRS
(850, 900, 1800, 1900MHz), WiFi 802.11b/g/n via Espressif WROOM02

Positioning

Loco Hybrid Positioning Engine, with locations from GNSS, visible cell towers and WiFi access points

Sensors

Temperature	<1°C (2°F) accuracy between -10 to 65°C (14 to +149°F) NIST traceable
Light	Light level

Power

Mains charging with internal backup battery for mains power interruptions

Mechanical Characteristics

Dimensions (LxWxH)	166 x 82 x 30.5mm (6.54 x 3.23 x 1.2in)
Weight	248g (8.77oz)
Material	PC+ABS
Colour	Black

Internal Backup Battery Life

Up to 48 hours of battery life when disconnected from mains power

Environmental

IP rating	Pending
Storage temperature	-10 to 40°C (14 to 104°F)
Operating temperature	-10 to 50°C (14 to 122°F)
Charging temperature	0 to 45°C (32 to 113°F)

Power cable

Power button / LED Indicator / Light sensor

Barcode with LocoTrack ID

Mounting brackets
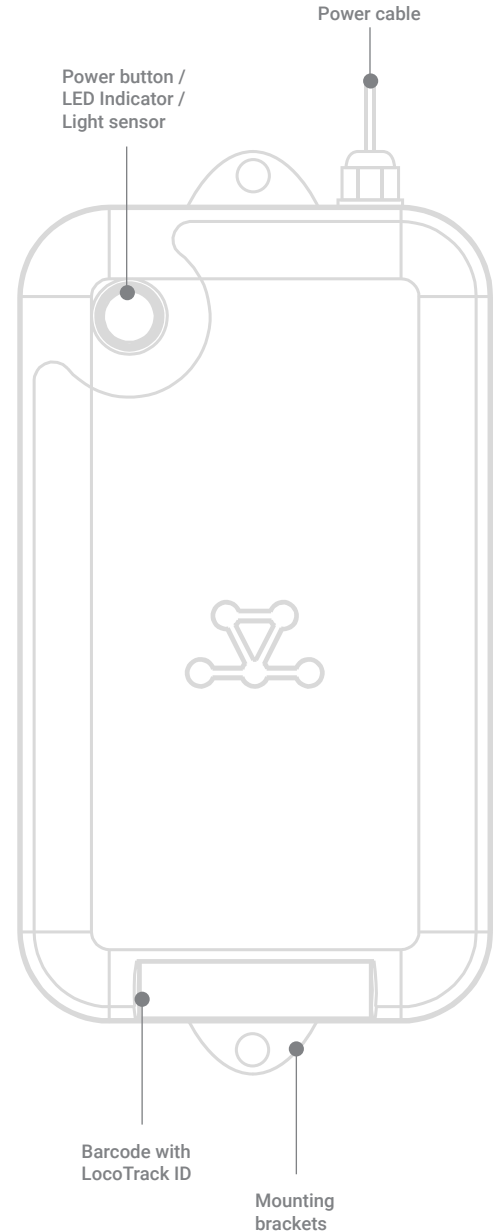
Works with

LocoTrack Devices	LTR-HFR4, LTP-HGD4, LTR-HGR4, LTP-HGP4, LTP-HGC4, LT-Z1U
LocoTag Devices	LTAG-E4BL, LTAG-E4B, LTAG-P4B, LTAG-E4P, LTAG-P4P, LTAG-T1B, LTAG-C2PL

Certifications

FCC, IC, MIC, NOM, ANATEL, UKCA, CE, ROHS, SUBTEL, NCC, NBTC, KC, WPC, RCM, RAMATEL