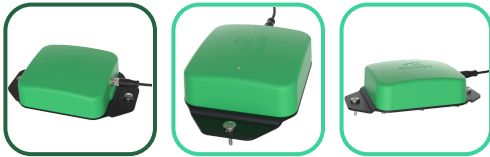# Portal
Ribbiot Portal

Product Overview

The Ribbiot Portal is both a GPS tracker and Gateway for communicating with Ribbiot Pods. This is a perfect solution for tracking large powered assets such as trailers and forklifts. It also works well for updating sites in real-time by updating the location of nearby Ribbiot Pod trackers.

The Portal has a large rechargeable battery that can operate in extreme temperatures and in both wired or wireless modes. Its rugged design ensures durability in harsh environments.

- Rugged Design: Water and dust-proof, impact and vibration-resistant.
- Long Battery Life*: 1-year battery life when updating position every 15min.
- Versatile Usage: Can be used on mobile assets, or be mounted stationary purely as a communication gateway for the Pods.

Software Features

The Ribbiot Portal offers a suite of software features including all features of the Ribbiot Pod. The Portal further enhances asset management and operational efficiency with the following:

- Remote update of all nearby Pods
- Movement based update intervals to optimize battery life
- Configurable for fixed installs or on mobile assets
- Configurable update intervals (15min - 12hrs) - prioritize recent data or battery life

*Battery life will be impacted by update interval rate and extreme weather conditions

Connectivity

Ribbiot trackers leverage advanced communication technologies to ensure accurate and reliable asset tracking.

- LTE - Cell connectivity for remote updates
- GPS - Location and movement information
  - Accuracy: +/- 30ft
- Bluetooth Low Energy (BLE)- Phone connectivity, general asset location information.
  - Accuracy: +/- 20ft.
  - Range: ~250ft.
- Ultra Wide-Band (UWB) - Precision asset location information.
  - Accuracy: +/- 1in.
  - Range: ~50ft.
- Near-Field Communication (NFC) - Phone tap and provisioning.

Range and accuracy are affected by nearby metal and other materials

Install Accessories

What's Included

- Portal Tracker
- Optional Power Cable: 4-pin w/ Aux. inputs & waterproof connector

Power

Built-in Rechargeable Li-Ion Battery
- Battery Operating Temperature: -40°F(-40°C) to 185°F (85°C)
- Battery Charging Temperature: -4°F(-20°C) to 140°F (60°C)

External Input
- 6-30V DC (0.1W typ / 8W max)
- Recommended 12V 1A Power Adapter

Enclosure

Material

- Enclosure: UV-Stabilized, chemical resistant, polycarbonate-based polymer
- Baseplate: Aluminum Alloy, Hard Anodized

Dimensions

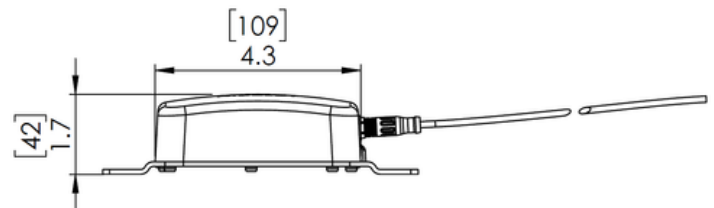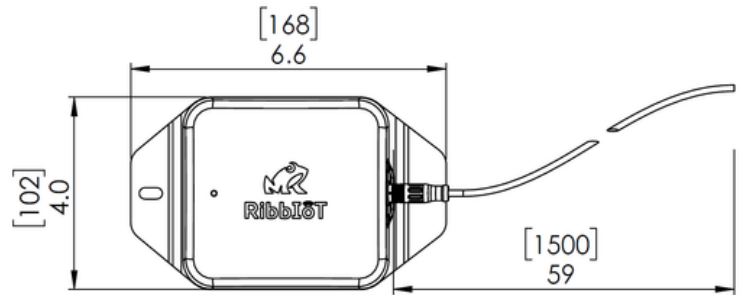- 6.6 x 4.0 x 1.7in (168 x 102 x 42mm); including mounting base plate

Weight

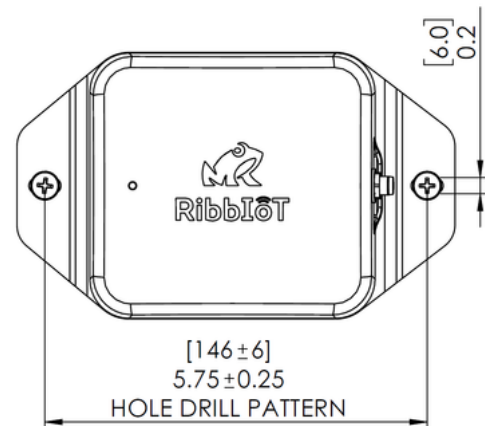- 14.2oz (402g)

Operating Temperature

- -40°F(-40°C) to 140°F (60°C)

IP Rating

- Submersible in up to 1m of water for 30 minutes
- Resistant to high-pressure washdowns

The Ribbiot Portal Asset Tracking Gateway - overall size and dimensions, including mounting base plate

Bolt Hole Drill Pattern for Mounting with Bolts / Screws

Fastener Installation

Recommended fasteners:

- Machine Screw (Socket / Button / Hex Head)
  - M5; i.e. M5x0.8
  - #10; (i.e. 10-24 or 10-32)

- Self Tapping Screw (Round / Hex Head)
  - #10 Self Drilling Screws for Metal, i.e. #10x0.5in.

- Wood Screw (Button / Hex Head)
  - #10 Screws for Wood: i.e. #10x0.75in

Update Intervals

External Power Default Behavior
- Continual scanning for nearby Pod devices
- GPS location updates every 3min

Battery Power Default Behavior
- Scanning for nearby pods every 15min
- GPS location updates every 15min

Update intervals are user configurable

Wiring and Charging

4 Conductor cable
- Power input and ground
  - Built-in input protection for reverse polarity, over current, under and over voltage.
- x2 Auxiliary Inputs
  - can be used to track hours, current state or usage history

Battery Charging
- Built-in charger, battery protection and power detection.
- 6hr for full charge is typical, 12hr charge time in cold temperatures < 32°F(0°C)
- The battery must be charged before use.

Typical Applications

Indoor Fixed Locations
- Warehouse walls or interior pillars, Storage facilities for gear/equipment, etc..
- Ideally powered by a 12V DC 1A power supply plugged into a nearby outlet
- Provides updated location information for all nearby pods installed on assets located in the warehouse

Powered Asset installation

- Trailer/Dolly/intermittent power - Connect to the 12V power and ground signal on the connector. The battery will charge when the trailer has power.
- Forklift/Vehicle - connect straight to the batteries for constant updates of all nearby pods and location of the lift. Connect the aux input to the ignition to track engine hours.
- Crane - connect to batteries for power and aux inputs to track engine hours of the main engine and PTO.

Connection	Color	Notes
Power Input	Blue	6-30V DC 0.1W typical 8W max while charging
Ground	White	Ground
Optional Engine Hours Input 1	Brown	Sense input can range from 6-30V DC, typically wired to switched power
Optional Auxiliary Input 2	Black	Sense input can range from 6-30V DC

*Place the Portal in clear view of the sky for best GPS and Cell performance

Learn more at Ribbiot.com