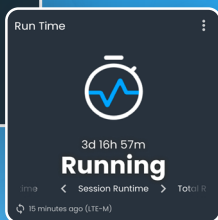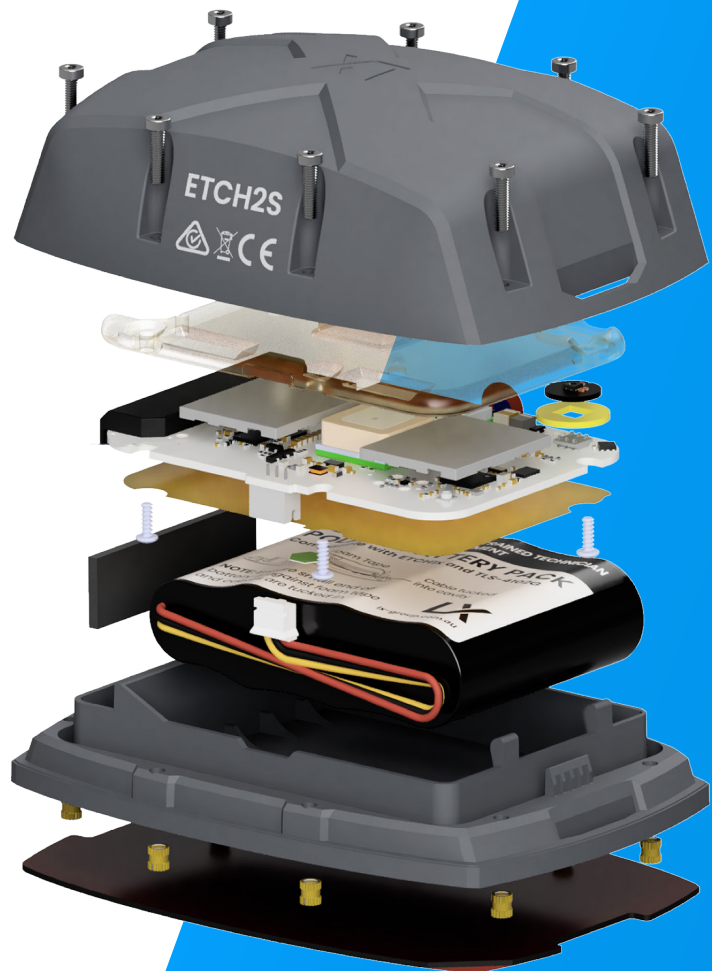# Polaris

LTE-M Battery Powered Tracker with Advanced Sense Capability

Polaris is the rugged yet powerful LTE-M tracker that can be fitted to almost any asset to provide regular, reliable location reporting, wherever you are.

From outdoor construction sites to indoor spaces, to vehicles on the move, use Polaris to get the insights you need for location reporting, geofencing, compliance, security and more.

Built to last, easy to deploy with real-time, actionable data sent directly to your phone, tablet, or computer.

Actual Size

Polaris at a Glance

- Long battery life up to 7yrs
- Compact by design
- BLE listening capabilities
- IP 68
- Rugged
- Military grade
- Peel 'n Stick application
- Scan 'n Play application
- INCYT geofence access

Key Use Cases

- Any assets that need to be tracked
- Aerospace ground assets
- Vehicles powered/non-powered
- Trailers
- Animal tracking

Applications

Gateway Function: Empowering Industrial IoT Applications in areas with limited Google mapping or weak LTE signal, including multi-storey buildings, hospitals, factories, and aircraft hangars.

Tracking Function: Close to real-time vehicle tracking with BLE and device ID listening, enabling precise temperature and humidity monitoring in applications such as those with refrigerated shipping containers during transportation, or heavy vehicles in transit.

Why Choose Polaris?

Polaris, the highly sought-after military-grade asset tracker, proudly leads our range with unmatched popularity and versatility. Its compact size, cutting-edge BLE listening capabilities, and impressive long battery life make it the top choice for Defense and Mining hire companies globally.

Polaris offers an advanced Sense+ version, equipped to precisely measure environmental temperature and humidity. This feature proves invaluable in the likes of the Apiary industry, facilitating the seamless tracking and monitoring of beehives.

Reporting Plans available for Polaris

Lite Plan

Longest battery life and low costs for your basic monitoring need. Perfect for replacing manual daily checks.

- Internal sensors sampled once a day
- Geolocation and transmission once a day
- Up to 7 years battery life*
- Configurable in-app alarm notifications
- 12-month data retention**
- 1 x Polaris

* under recommended operating conditions, in area with average to good LTE coverage

** as long as the plan is active for this Application

Standard Plan

The INCYT Team recommendation for best balance between performance, update frequency and battery life.

- Geolocation and Data transmission once a day, and on motion start/stop
- Internal sensors sampled every 4h
- Runtime/Time-in-Motion Monitoring
- Scans for up to 5 surrounding INCYT BLE devices
- Up to 3 years battery life*
- Configurable notifications in-app, by email and by SMS
- Unlimited data retention and .csv historical data download**
- 1 x Polaris

* under recommended operating conditions, in area with average to good LTE coverage, max 120x motion start+stop events per month on average
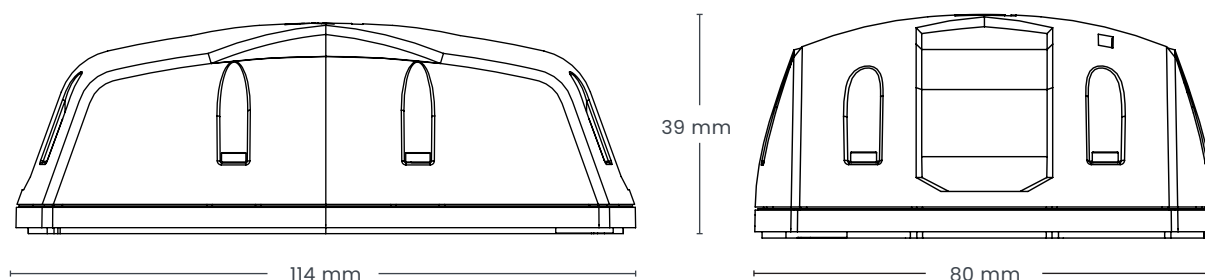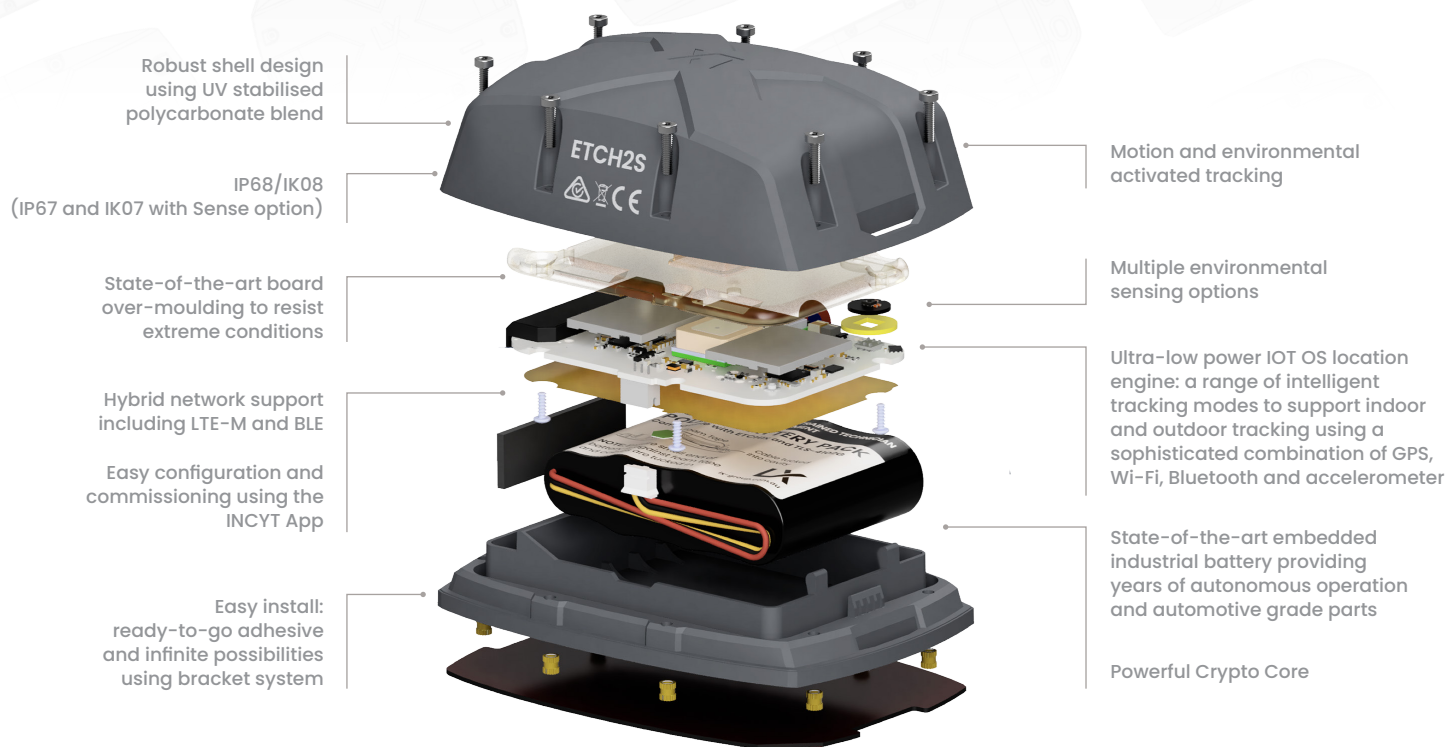
**as long as the plan is active for this Application

Pro Plan

Get frequent updates while still benefitting from a reasonable battery life and contained costs

- Geolocation and Data transmission every 6 hours, and on motion start/stop every hour while in motion
- Internal sensors sampled every hour
- Runtime/Time-in-Motion Monitoring
- Scans for up to 40 surrounding INCYT BLE devices
- Up to 1.5 years battery life*
- Configurable notifications in-app, by email and by SMS
- Unlimited data retention and .csv historical data download**
- 1 x Polaris

* under recommended operating conditions, in area with average to good LTE coverage, max 120x in motion per month on average, 5x BLE devices in range at each scan on average

** as long as the plan is active for this Application

Robust shell design using UV stabilised polycarbonate blend

IP68/IK08 (IP67 and IK07 with Sense option)

State-of-the-art board over-moulding to resist extreme conditions

Hybrid network support including LTE-M and BLE

Easy configuration and commissioning using the INCYT App

Easy install: ready-to-go adhesive and infinite possibilities using bracket system

ETCH2S

Motion and environmental activated tracking

Multiple environmental sensing options

Ultra-low power IOT OS location engine: a range of intelligent tracking modes to support indoor and outdoor tracking using a sophisticated combination of GPS, Wi-Fi, Bluetooth and accelerometer

State-of-the-art embedded industrial battery providing years of autonomous operation and automotive grade parts

Powerful Crypto Core

114 mm

39 mm

80 mm

LTE-M
WiFi

Attributes

Radio	LTE-M, BLE 5, WiFi, GPS
SIM	Integrated global chip SIM supporting most LTE-M operators
Region	Multi region LTE-M Supported bands: 2, 3, 4, 5, 8, 12, 13, 20, 28
Firmware upgrade	Via App and over BLE or Cellular
Battery	Replaceable Industrial Lithium Thionyl Chloride primary battery pack
Battery life	Up to 7 years
Location sensing	GPS, WiFi geolocation, BLE Beacon and Scan
Sense option	Accelerometer, Temperature, Relative humidity, Atmospheric Pressure
Size	39 x 80 x 114 mm
Weight	300g
Mounting options	VHB high strength adhesive, security bracket, cable-tie
Enclosure rating	IP68/IK08, (IP67/IK07 for models with Sensing Port*) * sensor port must be kept free of liquids and dust
Temp. range	-20ºC to +60ºC (0ºC to 40ºC recommended for optimal performance)
Accessories	Security Mounting Bracket, Weather Shield, Battery Replacement Kit (accessories to be purchased separately)

Ecosystem
at a Glance

	LYRA	POLARIS
Description	A simple, robust BLE Beacon. Use with a listening device (Antares, Polaris , Andromeda) for asset tracking and ambient condition monitoring.	Track, sense and monitor with this rugged, battery powered LTE-M tracker. Affix to powered and unpowered assets.
Typical Applications	Great to keep an eye on multiple assets in a vicinity, or when in motion across a supply chain.	Great for tracking assets such as shipping containers, pallets and trailers as well as fixed install for facilities monitoring.
Networks	🅱	LTE-M 🅱 WiFi 📍
Sensing	Temperature, Relative Humidity, Orientation	Temperature, Relative Humidity, Atmospheric Pressure, Orientation, Motion, Runtime, Light Detection*
Power	Sealed internal battery, ~ 7 years	Replaceable internal battery [2] ~ 7 years
Dimensions and Weight	21 x 38 x 45 mm | 36g	39 x 80 x 114 mm | 300g
Enclosure Rating [4]	IP68 (IP67 for sense version) IK08 (IK07 for sense version)	IP68 (IP67 for sense version) IK08 (IK07 for sense version)
Certifications [5]	CE, FCC, RCM, BTSig	CE, FCC, RCM, BTSig

[1] Satellite link limited to device location updates and limited BLE gateway capabilities (up to 4x surrounding INCYT
over-the-air Firmware updates and indoor geolocation are only available over the LTE-M link [2] Battery replaced
[3] Sold separately [4] Sensor port must be kept free from liquids and dust [5] Some certifications are still in progress, b

Note: WiFi and GPS technologies used as geolocations systems only

ANTARES	ANDROMEDA
Deploy a machinery area network for Lyra devices and get high frequency tracking and condition monitoring with this externally powered device.	**The best of Polaris with an added direct satellite connectivity fallback to keep your system online even in the most remote locations. [1]**
Ideal for creating geofences to record entry and exit of goods, for fleet vehicle tracking, in fixed installs for condition monitoring, and in combination with Lyra for monitoring goods in transit.	Perfect for remote tracking in areas like mine sites, remote haulage routes, and land-to-sea tracking. Add to powered and unpowered assets for supply chain overview.
LTE-M Bluetooth WiFi GPS	LTE-M Satellite Bluetooth WiFi GPS
Temperature, Relative Humidity, Atmospheric Pressure, Orientation, Motion, Runtime, Light Detection*	Orientation, Motion, Runtime
Externally power via IP68 connector - mains, automotive or solar kit power options [3]	Replaceable internal battery[2] ~ 3 years
50 x 110 x 114 mm | 220g	54 x 80 x 230 mm | 500g
IP68 (IP67 for sense version) IK08 (IK07 for sense version)	IP68 IK08
CE, FCC, RCM, BTSig	CE, FCC, RCM, BTSig