CyTrack™- LW

Secure Cargo and Asset Monitoring and Tracking Solution

Robust portable IoT Tracker

Features

REAL-TIME LOCATION
Monitoring
Know the accurate near real-time location of your Cargo/ Assets anywhere

LONG LIFE REPLACEABLE
BATTERY
With a Lifetime of Up to 4 years of continuous operation

CONFIGURABLE
ALARM PARAMETERS
Set critical alarm parameters and notifications for service dispatch, theft, or tampering

Robust CASING
FOR ENHANCED PROTECTION
IP-67 RATE Designed to withstand dust, moisture, and tough weather conditions

RELIABLE
CONNECTIVITY
LoRa with read range of up to 6 Km (in urban open space), Wi-Fi, Bluetooth (BLE 5.0).

MOVEMENT DETECTION
AND TRACKING
Idle detection and immediate notification of movement

Product Description

The IoT CyTrack™- LW is a highly versatile and innovative tracking solution that is designed for seamless monitoring and tracking of assets and cargo in both indoor and outdoor environments. With its multiple mounting options and easy attachment to assets and cargo, it guarantees continuous monitoring during offloading, storage in warehouses, and outdoor transportation. The device employs GPS for precise outdoor tracking, Wi-Fi, and Bluetooth Low Energy (BLE) for accurate indoor positioning when connected to Gateways.
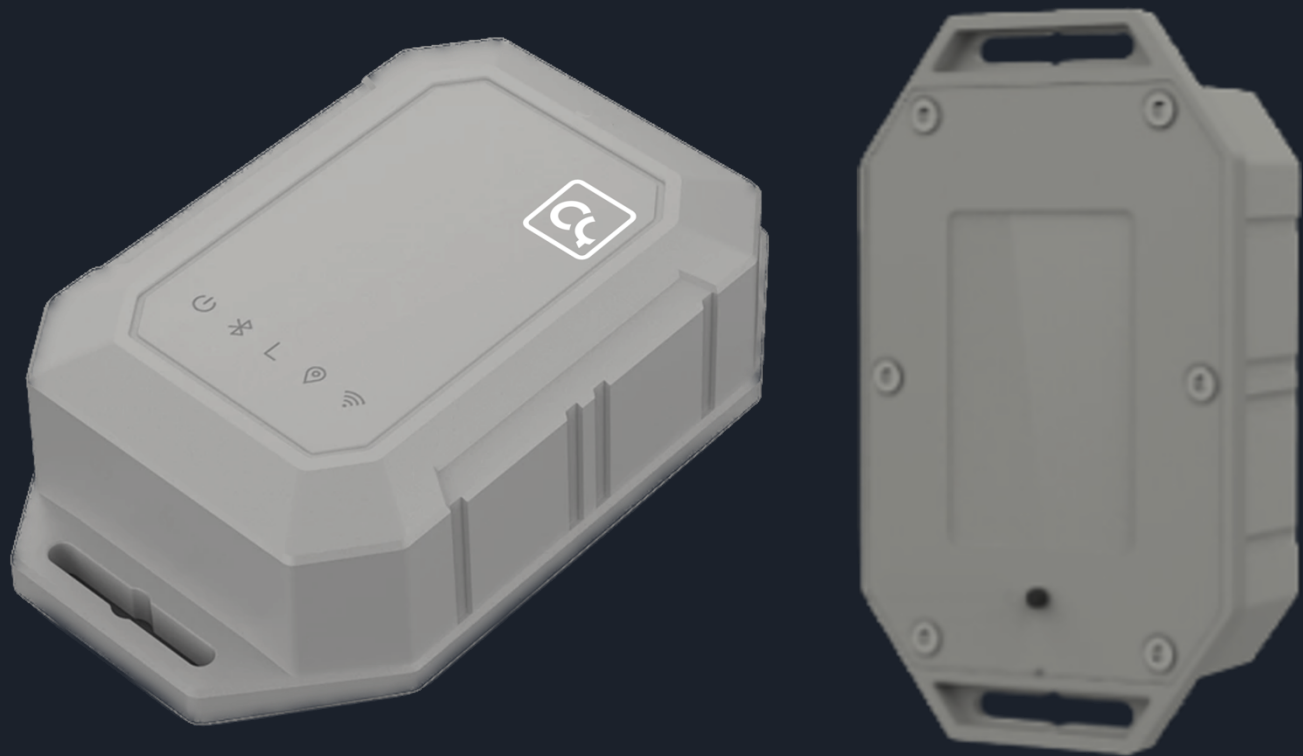
Ensuring reliable communication, the CyTrack™- LW employs Wi-Fi, Bluetooth Low Energy (BLE), and LoRaWAN; a wireless communication technology that offers long-range and low-power transmission to relay real-time asset and cargo positioning information to the Backend server. LoRaWAN's extensive range and low power usage are instrumental in enhancing the tracker's efficiency and effectiveness even in remote and challenging environments. In the event of network unavailability, the device logs data, and upon reconnection, transmits it to the Backend server.

The CyTrack™- LW has been designed with a weatherproof casing rated IP67, which ensures its resilience against dust, moisture, and other challenging environments. This feature enables the device to operate seamlessly even in diverse conditions. Furthermore, the powerful replaceable battery of the CyTrack™- LW allows it to function continuously for up to 4 years.

The entire system is managed by Cypod's IoT Management Software which is a frontend dashboard providing the means for asset and device management and data visualization. Thousands of assets can be visualized and managed through a single common operational dashboard. An API is available for the integration of sensor and location data directly into an ERP or logistics system.

The CyTrack™- LW goes beyond location monitoring, providing real-time alarms and notifications for preset parameters, such as entering or exiting predefined geofences, anti-tamper alarms, and idle detection. In summary, the IoT CyTrack™- LW is a compact and comprehensive solution that combines advanced communication technology and sensing capabilities with a robust design, making it an unparalleled solution for most tracking applications.

- Real-Time Location monitoring

- Robust IP67 rated casing withstands dust and moisture

- Up to 4 years battery life

- Real-Time alarms and Notifications

- LoRaWAN Connectivity, Wi-Fi, and Bluetooth Low Energy (BLE)

Industrial Equipment Tracking, Warehouse Inventory Monitoring

Livestock Monitoring and Tracking, Idle Detection for Intelligent Grazing Management.

Monitor cargo and shipping Containers within Ports and Custom

Use Cases

CyTrack™- LW serves multiple purposes, including monitoring and managing cargo and assets. It delivers real-time updates on the status and location of cargo and assets, enhancing security and enabling rapid service dispatch. Additionally, it is ideal for optimizing logistics processes, warehouse inventory management and monitoring, livestock tracking, and various other applications.

Technical Specifications

Type	Specification
Dimensions	122mm × 72mm × 33mm
Weight	~140 gm
Operational Temperature	-20°C /+60°C
Operational/Storage Humidity	Humidity 5-95% RH Non-Condensing
Battery	7800 mAh (3*AA Replaceable non-rechargeable battery)
Operating Current	< 180 mA
Sleep Current	< 15 uA
Standby working hours	4 Years under typical scenarios (WiFi Scan for 5 Sec., BLE Scan for 5 Sec., and GPS positioning for 3 min. daily)
GNSS antenna	Internal
Bluetooth	BLE 5.0
Communication	
RF Type	LoRaWAN V1.0.3
Frequency	EU868/AU915/US915/AS923/IN865/KR920/EU433/CN4 70/CN779/RU864
Max Transmitted Power	20 dbm
Sensitivity	-137 dbm@SF12 300bps
Read Range	Up to 6 Km (in urban open space)
Software Configuration	OTA via BLE

Sensors	
Tamper	Mechanical Switch Button
Accelerometer	Motion Detection
GNSS Features	
Horizontal Position Accuracy	<2.5m CEP
Concurrent Reception	3 (GPS, Galilio, GLONASS, Beidou)
GNSS Security	Anti-spoofing and anti-jamming
Reacquisition Time	<=1s
Sensitivity	Cold start: -146 dbm
	Tracking: -167 dbm
Housing Material	ASA + PC
IP Rating	IP67
Multiple Installation Ways	Double-sided tape, Screws, Straps, DIN Rail