CyNav™

Secure Drone Tracker Tag

Situational awareness of UAVs in real-time with the CyNav™ Tracker Tag Solution

Features

SECURE COMMUNICATION
End to End data encryption from sensor to the backend server

CONFIGURABLE ALARM PARAMETERS
Set critical alarm parameters and notifications for route deviation, breach of pre-defined settings, power status etc.

DATA SECURITY
All data collected from CyNav is encrypted at the sensor level

REALTIME LOCATION AND LIVE TRACKING
Know the accurate location of your UAVs and identify their path

MULTIPLE CONNECTIVITY OPTIONS
GSM/4G LTE, BLE5.3
Options: Thuraya SATCOM, WiFi, LAN, LoRa options

Product Description

CyNav™ is a state-of-the-art hardware transponder that can be affixed to Unmanned Aerial Vehicles to provide near real-time situational awareness of Drone and/or other UAV assets regardless of their location across the country.

Communication flexibility using any combination of GSM/4G/LTE/NB-IOT, BLUETOOTH, SATCOM, and GPS are a key differentiator in an ever-changing and increasingly competitive market across the spectrum of Smart City, space management, and Industrial IOT Drone applications.

The CyNav™ Drone Tracker is also prepared for 5G and LoRa and is configured to seamlessly switch between the different communication technologies to obtain the best possible coverage at the lowest possible cost

In a world of real-time connectivity, it is imperative to offer fast, flexible, and secure access at the click of a button regardless of the Device, Use Case, Network, or End User.

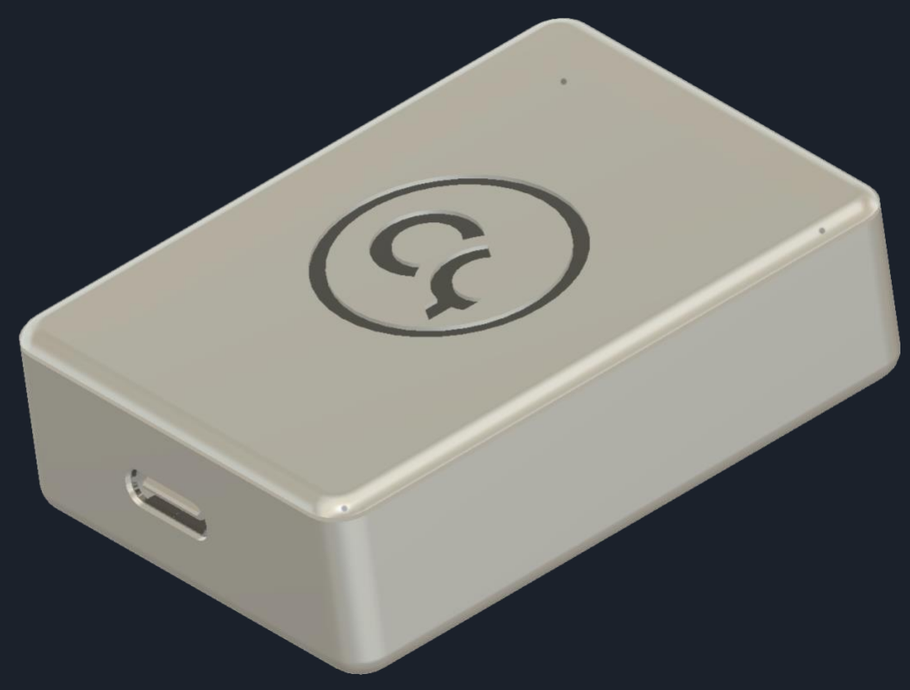
Cypod's mission is to enable our valued clients with cost-effective solutions that are flexible, safe, and scalable for future applications regardless of the UAV's location and/or size that is being used. Recreational,

Commercial and/or Public Safety UAV Applications can all rely on Cypod Solutions' unified framework of hardware sensors as well as backend monitoring and command/control systems to accomplish whatever goals and objectives our valued clients require today and in the future.

CyNAV™

Technical Specifications

- Real Time Location and Live Tracking
- Drone Identification
- Multiple Connectivity Options
- Intelligent Communication Selection
- Configurable Alarm Parameters



Technical Specification

Type	Specification
Dimensions	37.4x53.5x13.8 mm
Weight	40 grams
GNSS	
GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver Tracking	33
Tracking sensitivity	-165 dBM
Position accuracy	< 2.5 CEP
Velocity accuracy	< 1 s
Warm start	< 25 s
Cold start	< 35 s
Cellular	
Technology	LTE CAT M1/NB-IoT/GSM
2G bands	B2/B3/B5/B8
4G bands	LTE-FDD (CAT M1): B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85 LTE-FDD (CAT NB2): B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 850/900/1800/1900
Data transfer	LTE: Max. 588Kbps (DL)/Max.1119Kbps (UL) GPRS: Max. 107Kbps (DL)/Max. 85.6Kbps (UL)
Transmit power	Class 4 for GSM850/900: 23±2dBm, Class 1 for GSM1800/1900: 20±2dBm, Class 3 for LTE-TDD: 23±2.7dBm, Class 3 for LTE-FDD: 23±2.7dBm
Data protocol	MQTT/HTTPS
Bluetooth	5.3
Bluetooth Low Energy	Support
Bluetooth Direction Finding	Support
Power	
Internal Back-up battery	550 mAh Li-Ion battery 3.7 V (2 Wh)
Estimate lifetime	Minimum 6 hours
Operating environment	
Ingress Protection Rating	IP65
Battery charge temperature	0 ˚C to +45 ˚C
Battery discharge temperature	20 ˚C to +60 ˚C
Battery storage temperature	-20 ˚C to +45 ˚C for 1 month - -20 ˚C to +35 ˚C for 6 months
Charging USB	USB type C
SIM	Micro-SIM
LED indication	RGB
GNSS antenna	Internal High Gain
Cellular antenna	Internal GSM High Gain
Sensors	Altitude sensor BMP388
Max. GPS reporting rate	4s
Installation	using 3M fasteners