









Kingfisher Coldchain



CELLULAR 4G LTE-M / NB-IOT

FEATURES

-  High-precision GPS/GLONASS tracking device
-  1 x Analog Input, 2 x Digital Input, 1 x Switched Ground Digital Output, 1 x Ignition Digital Input, Switched Power Out
-  I²C Sensor Interface can be used for temperature and humidity sensing
-  Weatherproof and ultra-rugged IP67 Housing with compact and ergonomic design
-  Flexible Power Options- 3x AA Batteries with up to 7 years battery life or wired to permanent power
-  Built-in Battery Meter for remote Battery Life Monitoring and Remaining Life Predictions

OVERVIEW

Feature- rich battery-powered or powered GPS tracking device with inputs/outputs, I²C Sensor Interface, and WIFI Positioning for indoor and outdoor asset tracking and sensor monitoring applications.

APPLICATIONS

Cold Chain
Door Open / Close
Sensor Monitoring
Pump Control
Pulse Counting
Run Hours Monitoring
Indoor/Outdoor Asset Tracking
Run Hours Monitoring
Preventative Maintenance
Theft Recovery



SMARTS

BATTERY LIFE MONITORING

Built-in Battery Meter for monitoring battery use and remaining life predictions

ENVIRONMENTAL MONITORING

Interface with a range of sensors such as temperature, humidity, moisture, depth, and more

RUN HOUR MONITORING

Calculate run hours and distance travelled (odometer) to understand and optimize asset utilization

GEOFENCING

Create custom geofences and alerts if an asset enters or leaves specific locations.

PERIODIC OR MOVEMENT BASED

Configure parameters to send updates based on set time intervals (1x, 3x, 5x a day, etc) or when movement occurs. Adaptive tracking technology detects when the device is on the move and increases the update rate, providing detail when you need it while conserving battery when stationary.

IMPACT DETECTION

Configure impact-detection alerts when g-forces are exceeded by a user defined threshold.

PREVENTATIVE MAINTENANCE

Set reminders based on distance traveled and run hours to reduce maintenance and repair costs.

REAL-TIME TRACKING

Device remains continuously connected while on the move for real-time asset tracking.

THEFT RECOVERY

Switch to Recovery Mode in the case of theft or loss to activate real-time tracking at 30-second intervals for asset retrieval.

RUN HOUR MONITORING

Capture run hours based on movement to understand and optimize asset utilization.

SLEEP MODE

Stationary devices enter sleep mode, switching the update rate to only twice per day until movement occurs to conserve battery life and optimize data usage when powered by batteries).

TECHNICAL SPECIFICATIONS

POWER

Batteries	3 x AA Lithium (LiFeS) or external 5 -16V DC
Battery Life	Up to 7 years of battery life at once daily heartbeats /1-year battery life at once hourly heartbeats
Sleep Current	<10 uA, Average current in lowest power configuration

PHYSICAL SPECIFICATION

Dimensions	L 135 x W 90 x H 35 mm
Weight	232g
Housing	ABS Polycarbonate Plastic
IP Rating	IP67
Operating Temperature	-20°C to +60°C

COMMUNICATION

GPS	Concurrent GPS / GLONASS Internal Antenna
Cellular	Antenna Internal
WiFi Positioning System	Indoor asset location using Wifi Positioning Systems.
Security	AES-256 Encryption from device to server
Integration	Third-Party Integration Webhook, TCP or HTTPS

PERIPHERALS

3-Axis Accelerometer	3-Axis Accelerometer to detect movement and high G-force events
Flash Memory	Store weeks of records if device is out of cellular coverage. Storage capacity for over 10 days of continuous 30-second logging.
Analog Inputs	1 x 0-30V Analog Inputs, Auto Ranging, 12-bit ADC
Digital Inputs	2 x Digital Inputs (0-48V DC input range)
Digital Outputs	1 x Switched Ground Digital Output to switch lights, relays, buzzers, etc.
Ignition	1 x dedicated ignition Digital Input 0-48V DC, 5V on/off threshold
I2C	I2C (inter-IC communications) is an interface that can be used for sensor modules such as temperature and humidity.
Switched Power Out	Used to control the 3.3V power to external sensors and peripherals.

WARRANTY

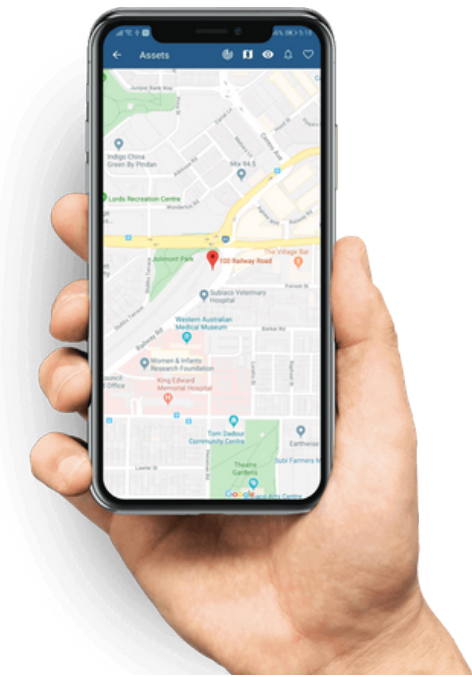
One year manufacturer’s warranty.



I2C Temperature + Humidity Probe



I2C Temperature Probe



FEATURES



Locate vehicles and assets – whether you want to track a single asset or an entire fleet



See all routes and rides on the map, and a detailed timeline of everywhere the object you are tracking has been



Geofence, create or download individual virtual zones, which can trigger an alert when the object you are tracking approaches its destination, or is close to custom zones



Track temperature/humidity and driver behaviour for produce and animals when being transported



Roll over alert if one of your vehicles quads or bikes has rolled over accelerating help and medical assistance

Kingfisher Tracking Platform



OVERVIEW

By tracking and collating the data your assets generate, you can run operations more efficiently and improve the safety of your staff. The platform also allows you to control livestock location, recover lost equipment and keep products fresh and safe

