

# hiro

Hihiro blends UHF, satellite, cellular, Bluetooth, Ethernet and WiFi to provide seamless communication coverage both indoors, outside and underground.



Accurate person-down detection - angle, movement, free-fall and heartrate



Simple 5-button interface for SOS, Check In, Monitor Me & Tracking



Configurable audible and visual alerts, as well as the option for covert mode



Multiple pendants can roam between multiple base stations, providing seamless connectivity



Integrate with Alarm and Emergency Control Centres (internal or external)



UHF communications with hihiro Pendants ranging up to 1km away



Secure and reliable message delivery with AES128 encryption



Hardwearing design and IP65 waterproof rating



Enhance in-building location using low-cost and low-energy Bluetooth beacons



In/out of range notifications to ensure connectivity at all times



Pendants are automatically sleep-cycled based on proximity to charger to prolong battery life



The pendant is a simple "clip and go" wearable and lightweight device



Automatic low battery warning with full charge in under 4 hours using inductive chargers

## Industry-first duty of care devices

Hihiro is designed to protect workers who operate in remote environments and perform high-risk, specialised tasks. It's an industry first in a whole new category of duty of care devices - consisting of hassle-free wearable pendants and base stations which are installed in either vehicles or fixed infrastructures. Workers have the freedom to work anywhere with the confidence that they will stay connected and protected - the UHF pendants coupled with the base stations provide seamless connectivity by automatically connecting to the required network, whether it's cellular, satellite, Ethernet or WiFi.

**Exclusively available**  
through our Partner Programme

# Technical Specification: Pendant

## Physical

Dimensions: 115 x 50 x 17mm

Weight: 270g

## Interface

5 buttons

4 high-intensity LED and 1 RGB LED

Mechanical vibrator

Magnetic speaker

## Connectivity

GPS: ublox SAM-M8Q w 72 channel tracking ANT+ 2.4 GHz

UHF: 433 MHz, max TX power 17 dBm

## Environment

Operating Temperature: -20 to +60°C Charging Temperature: -20 to +40°C Humidity: 95% RH 40°C

Storage Temperature: -45 to +75°C

Vibration & Shock: MIL-STD-810G, SAE

J1455 IP Rating: IP65

## Power

Battery technology: Li-Ion

Battery Capacity: 1100 mAh

Typical running time: > 14 hrs

# Technical Specification: Base Station

## Physical

Dimensions: 179x 140 x

38mm Weight: 420g

Side-mounting screw tabs

## Interface

Input power header (12VDC - 24VDC)

General purpose IO header (5VDC Output, Ground, Ignition Input, Ignition Output, Digital IO1, Digital IO2)

Dedicated USB port for hiio Pendant charging and 4x USB ports\*

Ethernet / WiFi\*

External UHF 433MHz antenna (SMA)

External GPS high gain active antenna (SMA)

External Iridium SBD helix antenna

(SMA) LED & Piezo buzzer

## Connectivity

UHF: 433MHz, max TX power 17 dBm

GPS: ublox MAX-M8Q w 72 channel tracking Iridium: 9603 SBD transceiver

Ethernet / WiFi / Cellular \*

4G LTE Cat-M1 \*

Bluetooth: iBeacon support \*

A single basestation supports up to 50 concurrent hiio Pendants via Iridium and 200 via Ethernet/WiFi

## Environment

Operating Temperature: -20 to +60 deg

C Charging Temperature: -20 to +40

deg C Humidity: 95% RH @ 40 deg C

Storage Temperature: -45 to +75 deg C

Vibrations & Shock: MIL-STD-810G, SAEJ1455

IP Rating: IP30

## Power

Internal battery backup: Li-Ion 4500 mAh Typical running time on battery: >48 hrs

Typical running time on battery: >5hrs (on Ethernet/WiFi)

Charge from flat: <6hrs

Internal battery backup with low battery warning

Supports 12V and 24V vehicles

## In-Vehicle Management System

Simple IVMS functions including ignition on/off, Configurable GPS tracking interval, SOS tracking interval & heartbeat interval

Configurable runtime ignition detection or wired ignition input

IVMS functions configurable via GAP Portal

Configurable vehicle battery protection isolator

## Compliance

RCM, UL, WEEE, RoHS

Carriers: Iridium, Telstra

## Other

AES128 encryption

Supports external SOS button & Pan-Pan button \*

Easy firmware upgrade via Bluetooth

\*optional

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