














# hiro

Hiro 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
-  Hardwearing design and IP65 waterproof rating
-  Simple 5-button interface for SOS, Check In, Monitor Me & Tracking
-  Enhance in-building location using low-cost and low-energy Bluetooth beacons
-  Configurable audible and visual alerts, as well as the option for covert mode
-  In/out of range notifications to ensure connectivity at all times
-  Multiple pendants can roam between multiple base stations, providing seamless connectivity
-  Pendants are automatically sleep-cycled based on proximity to charger to prolong battery life
-  Integrate with Alarm and Emergency Control Centres (internal or external)
-  The pendant is a simple "clip and go" wearable and lightweight device
-  UHF communications with hi-ro Pendants ranging up to 1km away
-  Automatic low battery warning with full charge in under 4 hours using inductive chargers
-  Secure and reliable message delivery with AES128 encryption

## Industry-first duty of care devices

Hi-ro 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, SAE J1455  
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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