

BDG Hawk

DATASHEET

Connected Worker Solution

Revision V3.0

Date: 2021-11-12

www.accent-systems.com

For any assistance please contact:

Email: info@accent-systems.com

For more information or technical support please visit:

<https://accent-systems.com/support/>

Copyright

THE INFORMATION CONTAINED HERE IS PROPRIETARY TECHNICAL INFORMATION OF ACCENT SYSTEMS, REPRODUCTION, DISSEMINATION AND EDITING OF THIS DOCUMENT AS WELL AS UTILIZATION OF THE CONTENT ARE FORBIDDEN WITHOUT PERMISSION. OFFENDERS WILL BE HELD LIABLE FOR PAYMENT OF DAMAGES. ALL RIGHTS ARE RESERVED IN THE EVENT OF A PATENT GRANT OR REGISTRATION OF A UTILITY MODEL OR DESIGN.

THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.



Features

- Connected Worker safety and contact traceability system.
- Comfortable wearable device.
- Privacy guarantee, only the authorities can have access to trace information.
- Nordic Semiconductor nRF52840 chipset, low power consumption
- Rechargeable internal lithium battery.
- Integrated battery protection.
- 3 configurable buttons.
- 2 RGB LEDs. One for notifications and other for battery status.

Main Specifications

Connectivity	BLE4/5, UWB, GPRS, NB-IoT, GPS
Indoor distance accuracy	≈0.2 m using UWB ≈4 m using BLE
Battery	700mAh rechargeable battery
Charging interface	Built-in USB C charger
Working temperature	-40°C - 70°C
Size	90 x 60 x 12 mm
Weight	72g
IP rating	IP67

Positioning

Indoor distance measurement range	≈20 m using UWB ≈40 m using BLE
Indoor distance precision	≈0.2 m using UWB ≈4 m using BLE
Protocol security	Own secure protocol

Sensors

Accelerometer	Motion detection, shock detection, auto-shutdown
Pressure	Height detection, indoor height location, under/over pressure alarm
Temperature	Under/over temperature alarm
Battery sensor	Low battery level alarm, Charge finished alarm

Power

Input power connector	USB C
Input voltage range	5V DC with over-voltage protection
Battery	Lithium rechargeable battery
Battery capacity	700 mAh
Full charge time	3-4 hours

Enclosure

Material	Main body: PC+ABS Buttons, caps & gaskets : TPU
Size	90 x 60 x 12 mm
Weight	72g
Working temperature	-40°C - 70°C
IP rating	IP67

Connectivity

Bluetooth

Frequency	2.4GHz
Antenna	Omnidirectional
BLE version	BLE 4.0 / BLE5.0
Indoor distance measurement range	<40 m
Indoor distance accuracy	>4 m (depending on anchor density)

GNSS

Frequency	1559-1606.6MHz
Antenna	Omnidirectional
Compatibility	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS
Outdoor distance accuracy	>3 m

Cellular

GSM Bands	850 / 900 / 1800 / 1900 MHz
LTE Bands	LTE-FDD: B1/B2/B3/B4/B5/B8/B12/ B13/B18/B19/B20/B26/B28 LTE-TDD: B39 (for Cat M1 only)
Antenna	Omnidirectional

NFC

Frequency	13.56MHz
Antenna	34.39mm x 46.10mm

Ultra Wide-Band (UWB)

Frequency/channels	3.5GHz - 6.5GHz - channel 1, 2, 3, 4, 5, 7
Antenna	Omnidirectional
Indoor distance measurement range	<25 m
Indoor distance accuracy	>0.2 m



Terra Alta, 1-3 (Pol. Ind. Can Carner)
08211 Castellar del Vallès Barcelona - Spain
Telf: (+34) 93.512.51.38

www.accent-systems.com