Helo™

BioSense
h e a l t h   b a n d

Helo

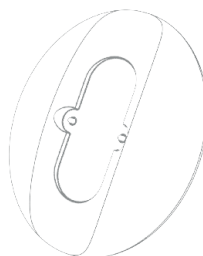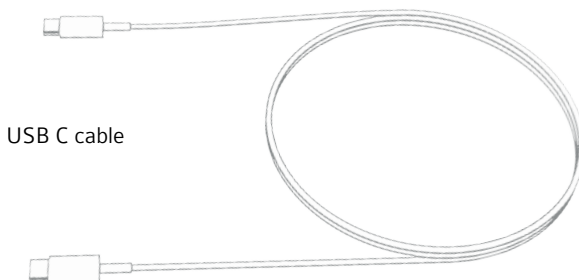## BioSense
health band

1

Packing List

The box contains the following items

BioSense
health band

Charging Base
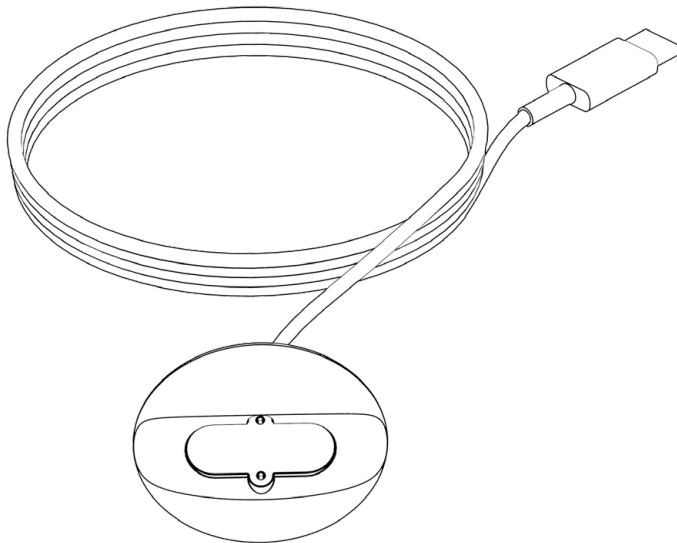

USB C cable

Helo

BioSense
health band

2

How to charge

1. Plug the USB C cable into the socket on the charger base

2. Place the **BioSense** onto the charging base, aligning the metal contacts on the back ofthe band with the gold pins on the charging base. This will line up the magnets in thecorrect direction

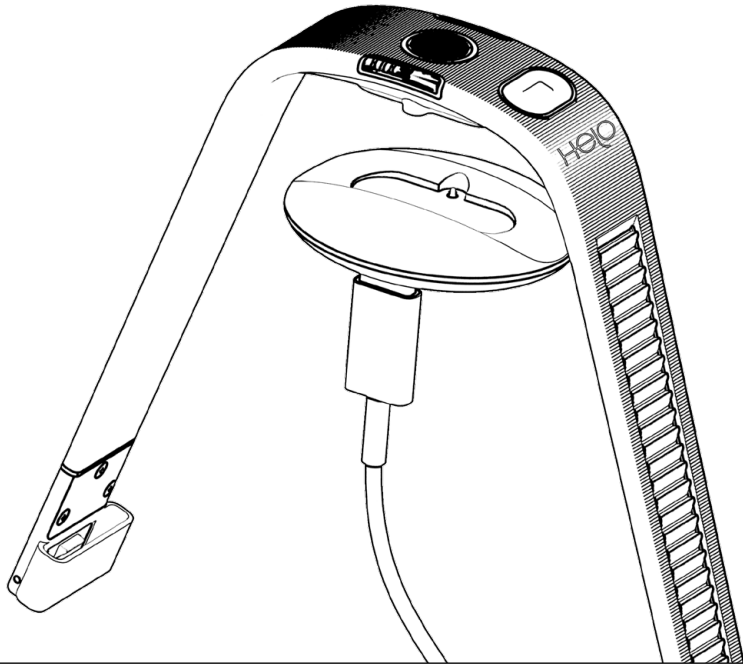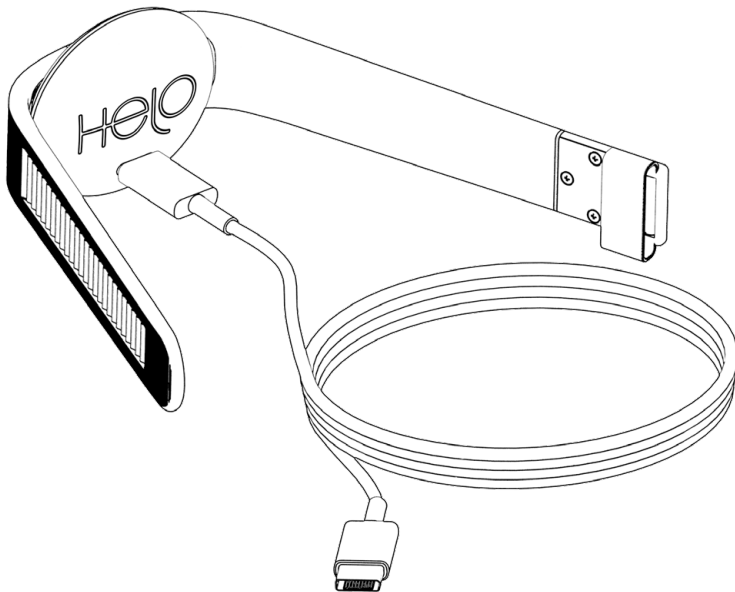3. Place the charge on a flat surface with the BioSense sideways

1

Input voltage: 5V DC.
Charging time: about 2 hours.

2

3

HELO

BioSense
health band

2

How to use

1. **APP Download**
    Download the HELO Smart App from the App Store, Google Play Store, or HELO App STORE.
    Note: To use "HELO Smart App" on an iPad, you need to select "iPhone only" when downloading it from the App Store.

2. **Initial Setup**
    The first time you use your device, place it on the charging base after it has been removed from the box. Once the green LED lights up, you can connect your device to the app.

3. **Power On**
    When the Band is powered off, press and hold the touch button for 5 seconds to power on the device. Additionally, when the Band is powered off and placed on the charger, the device will power on.

4. **Power Off**
    When the app is connected to the device, click "Turn off the band" into the app to shutdown.

5. **Start Measurements**
    Initiate BP/SpO2 measurements through the device: When the Band is powered on, quickly double-click the touch button, and the dark blue light will flicker, indicating that the initiation is successful. Touch the finger sensor to measure. Upon completion, the light turns off, and the dark blue light flickers. A red light will flicker if the measurement fails. *Through the App*: When the App is connected to the device, select the health function then click "Measurement", and the blue light flickers, indicating that the initiation is successful.

6. **Restart**
    When the Band is powered on, press and hold the touch button for 10 seconds to enter the restart mode (red light flicker), double-click the touch button within 5 seconds to confirm the restart (shut down first, then power on). If the touch button is not double-clicked for more than 5 seconds, the Band will automatically exit the restart mode, and the red light will stop flickering.

7. **Reset**
    When the app is connected to the device, click "Reset the band" in the app to shut it down. All the data not yet synchronized will be lost.

8. **Guardian**

   The red light will blink for 10 seconds, then stop. To see the values connected to the Guardian Alerts open the HELO App.
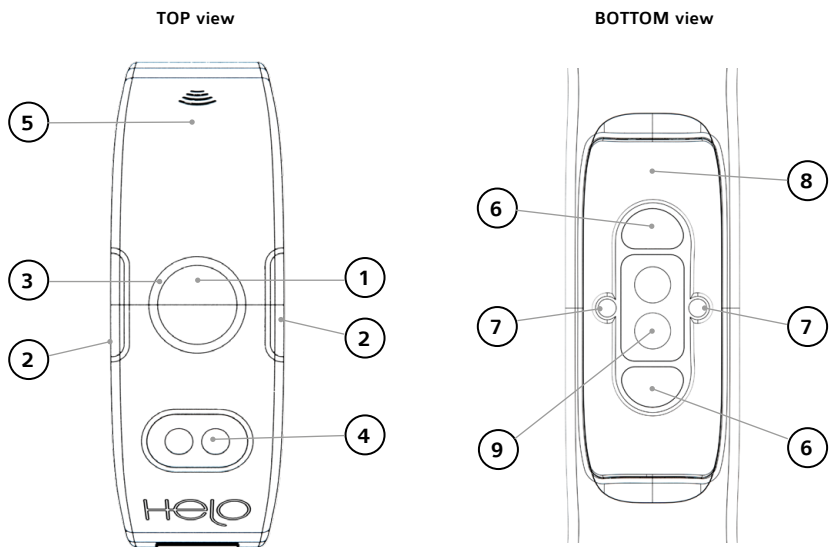
9. **Compatibility & Support**

   Support Android 5.0 or above, iOS 10.0 or above.

10. **Connection**

    After finishing the download, open the App and register by opening an account, then complete the connection process according to the operating instructions on the App.

11. **Check Connection Status**

    Touching the button once will make the LED light flicker twice. The light will flicker light blue if the device is connected - green if not connected.

TOP view   **BOTTOM view**

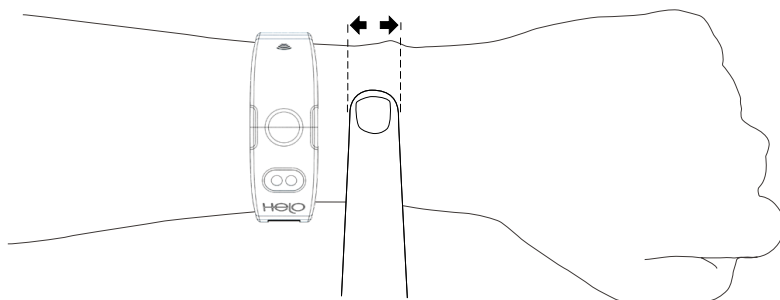|	
①	Power ON button	⑥	ECG contact plates
②	ECG & BIA electrodes	⑦	Charger pins
③	LED light	⑧	6-Axis Gyroscope
④	BP, SpO2, APG sensor	⑨	Skin temperature, continuos AFIB, continuos HR, SpO2 sensors
⑤	Built-in VyvoPay chip		

Helo

BioSense
health band

3

Introduction for important features

Heart rate monitoring

To monitor heart rate more accurately, please wear the band approximately one finger's length away from the wrist bone.

Helo

BioSense
h e a l t h   b a n d

4

More information

Waterproofing instructions
The BioSense's waterproof rating is IP68 (50m).

NOTE

1. *BioSense is only suitable for swimming. If you wear BioSense while diving, it may cause damage to the device. Such damage is not within the scope of the device's warranty.*

2. *While wearing the device, swim, shower, and wash hands only under cold water.*

3. *BioSense does not have a waterproofing effect for other liquids like acids and alkaline solutions, chemical reagents, and other corrosive liquids. If you inadvertently encounter or are in contact with a corrosive liquid, please make sure to clean with clean water and dry the device. The damage caused due to improper use or abuse of the device is not within the scope of the device's warranty.*

Helo

BioSense
h e a l t h   b a n d

5

Tech Sheet

HARDWARE and SOFTWARE specification

Process description	1. Wristband material: liquid silica gel + PA two-color coating, surface drying pattern + UV modification, built-in magnet adsorption 2. Heart electrode: stainless steel 316L + pvd gold 3. Bottom shell: PA embedded 2 pieces of 316L stainless steel + PVD + 2PCS POGO pin	
Basic specification	size	226*20*7.5 mm.
	weight	22 gr.
	color	Black/Grey Strap with Gold or Silver Electrode & Closure
Hardware specification	MCU	GOODIX5515--ARM Cortex-M4 64MHZ
	built-in storage	RAM: 256KB, ROM: 1Mbit, external 8MB
	Compatibility	iOS 10.0 or above, Android 5.0 or above
	display	---
	resolution	---
	touch	Capacity touch
	button	ABS touch button
Connection	bluetooth	BLE 5.0
	WIFI	---
	NFC	Support VyvoPay
Sensors	G-Sensor	Bosch BMA421
	Gyro	STK LSM6DS3TR-C, ST
	BIA	Maxim 30001
	Fingertip blood oxygen + blood pressure	Maxim 30101+32664
	Body Temp	Nano core micro NST117
	ECG+Heart rate	Maxim 30001

Battery	Category	Lithium polymer
	Standard Voltage	3.8 V
	capacity	45 mAh
	size	19.5*11*2.5 mm.
App	HELO Smart	Health Features: Heart Rate, Respiratory Rate, Energy, Stress, ECG, BIA, APG, Blood Pressure, Blood Oxygen, Arrhythmia Detection, Temperature, Sleep
		Activity data: steps, calories, stand still time
		Guardian Alerts: heart rate, respiratory rate, blood pressure, blood oxygen, temperature, atrial fibrillation
Other data	waterproof level	IP68
	charging time	1,5 hours approximately
	battery life	3~6 days / Based on different usage scenarios
	buckle material	Stainless steel + 18kt Real Gold Plated
Pack	Gift Box	W7.4 *L12.3*H5.4mm
	Accessories	Charger Base, Type C Cable with 70cm Long
Certificate	Certification	CE/FCC/IC

FUNCTIONS

Healthy	**HR**	Support to turn on/off 24-hour automatic measurement, the automatic measurement interval is measured once every 10 minutes (the whole point: 00, 10…)
		Support manual measurement, app initiated
	BR	Support turning on/off 24-hour automatic measurement (determined by whether the heart rate is turned on/off), and the automatic measurement interval is measured once every 10 minutes (the whole point: 00, 10…)
		Support manual measurement, app initiated
	ECG	Initiate the measurement from the APP, and touch the left and right electrode pads with your fingers
		Data results are uploaded to the app for AI analysis
	BIA	Initiate the measurement from the APP, and touch the left and right electrode pads with your fingers
		The data is uploaded by the app to the server for calculation and returns results
	Energy	Support 24-hour automatic measurement, the automatic measurement interval is 1 hour, and the measurement is on the whole point
		Support manual measurement, app initiated
	Stress	Support 24-hour automatic measurement, the automatic measurement interval is 1 hour, and the measurement is on the whole point
		Support manual measurement, app initiated
	BP	Connect APP for blood pressure calibration
		Support 24-hour automatic measurement, the automatic measurement interval is 1 hour, and the measurement is on the whole point. Support manual measurement, app initiated
	APG	The data is uploaded by the app to the server for calculation and returns results
		Support manual measurement: Launched from App
	SpO2	Support 24-hour automatic measurement, the automatic measurement interval is 1 hour, and the measurement is on the whole point. Support manual measurement, app initiated
	AFib	Control the switch from the app. After turning it on, the detection is turned on immediately, and the green light on the back of the band is always on.
	Sleep	The sleep quality estimation will be calculated by collecting all PPG values during the entire night and combining them with gyroscopic sensor-measured values.
	Body Temp.	Support 24-hour automatic measurement
		Get from temperature sensor

Guardian	HR		APP settings, show alert by LED light, send email
	BR		
	BP		
	SpO2		
	Afib		
	Body temperature		
Activity data	Steps		APP display
	Calories		
	Stand		
Electrode	Distribute to the left and right sides of the band host, used for ECG/BIA measurement	ECG	The index finger and thumb are placed on the electrode pads on both sides respectively (the measurement precautions will be displayed on the APP along with a operation gesture diagram)
		BIA	Pinch the electrodes on both sides with the index finger and thumb respectively, and the left and right hands cannot touch each other (the measurement precautions will be displayed on the APP along with a operation gesture diagram)
Touch button	Click	Double click in quick succession	Start the SpO2/BP measurement (simultaneous measurement). Within 10 seconds of starting, the light will flicker blue for 1 second. If the finger does not come in contact with fingertip LED light, it will automatically cancel. Measurement duration time: 60 seconds.

LED LIGHT STATUS

When manually starting the SpO2/BP measurement, the light will be red after coming in contact with your finger.

LED lights				
Low battery: ≤20%, flickers once every 1 minutes	⭕	Purple	R:113 G:44 B:159	Flicker
Band charging: flickers once every 2 second	⭕	Green	R:90 G:190 B:50	Flicker
Fully charged band: always bright				Always bright
Measurement request via smartphone: flickers 2 times	⭕	Blue	R:0 G:160 B:220	Flicker
Measurement via touch button: during blood oxygen/blood pressure measurement: 1 › When the measurement is initiated, it flickers 2 times; 2 › When the fingertip covers the detection window, stop flashing (no light) to avoid affecting the data				
Measurement completed via touch button: when the health measurement is completed, it is always on for 2 seconds				Always bright
Firmware update: The band is updating the firmware				
Measurement fails: red flicker (2 times for second)	⭕	Red	R:230 G:0 B:0	Flicker
Guardian Alert: flashes for 10 seconds or the user can click the button to stop it				
Power On: When the band is powered off, press and hold the touch button for 5 seconds to power on the device. The LED light indicator will cycle through colors for 10 seconds. Additionally, when the Band is powered off and placed on the charger, the device will power on.	⭕	Multicolor	RGB	Flicker
Power Off: When the band is powered on, Power off is initiated through the APP. Click "Turn off the band" to complete the shutdown. The LED light indicator will cycle through colors for 10 seconds.				
Restart: When the Smartband is powered on, press and hold the touch button for 10 seconds to enter the restart mode (red light flicker), double-click the touch button within 5 seconds to confirm the restart (shut down first, then power on). If the touch button is not double-clicked for more than 5 seconds, the band will automatically exit the restart mode, and the red light will stop flickering.				
Connected: When the Smartband is powered on, it will flicker 2 times for every 15 min. Color changes with connection status: 1 • Connection: light blue; 2 • Disconnected: green.	⭕	Green/Light blue	R:0 G:160 B:220	Flicker
Check Device on: To verify if the device is on. Click once on the touch button and the light will flicker twice for 2 seconds. Color changes with connection status: 1 • Connection: light blue; 2 • Disconnected: green.				

Helo
BioSense
h e a l t h   b a n d

6

Device Maintenance

Device care

1. Do not use any sharp objects to clean the device.

2. Avoid using chemical cleaners, solvent solutions, or insect repellents that might damage the plastic components of the device.

3. Thoroughly rinse the device with clean water after exposure to chlorine, seawater, sunscreen, alcohol, cosmetics, or other harsh chemicals. Prolonged exposure to these substances may damage the device.

4. Avoid pressing the keys while underwater.

5. Avoid extreme shock and harsh treatment of the device, as it may reduce device product life.

6. Do not expose the device to extreme temperatures that are either cold or too hot for an extended period, which may cause permanent damage.

7. After each training session, please rinse the band with clean water.

Cleaning the device

When charging the device, even the slightest amount of sweat or moisture can cause corrosion of the charging terminal, which will hinder data transmission and affect charging as well.

1. Gently wipe the device with a cotton cloth with a mild neutral detergent.

2. Please allow the device to dry completely after cleaning.

Helo
7

BioSense
health band

Important safety and product information

- If you have a pacemaker or other internal electronic device, consult your physician before using a heart rate monitor.

- The BioSense optical wrist heart rate monitor occasionally emits green light and flashes. Consult with your physician if you have epilepsy or are sensitive to flashes of light.

- Always consult your physician before beginning or modifying any routine or exercise program.

- The device, accessories, heart rate monitor, and related data are intended to be used only for recreational purposes, not medical purposes. They are not intended to diagnose, monitor, treat, cure or prevent disease.

- The heart rate readings are for reference only, and no liability is accepted for the consequences of any wrong interpretation.

- Although the optical wrist heart rate monitor technology typically provides accurate data for the user's heart rate, there are inherent limitations with the technology that may cause some of the heart rate readings to be inaccurate under certain circumstances, including the user's physical characteristics, device installation, and the type and intensity of activity.

- The activity trackers rely on sensors to track your movement and other metrics. The data and information provided by the device are intended to assess your activity and metrics closely. Still, they may not be completely accurate, including the data for steps, sleep, distance, heart rate, and calories.

- Do not immerse or expose batteries to water or other liquids.

- Do not expose the device to a heat source or high-temperature location, for example, in an unattended vehicle in the sun. To avoid damage, remove the device from the vehicle or store it out of direct sunlight, such as the glove box.

- Do not operate the device outside the specified temperature ranges in the printed manual, which are included in the product's packaging.

- When storing the device for an extended period, please store it within the temperature ranges specified in the printed manual which is included within the product's packaging.

- Do not use a power or USB cable that is not approved or supplied by the manufacturer. Please use within the temperature ranges specified in the printed manual, which is included in the product packaging.

HELO

BioSense

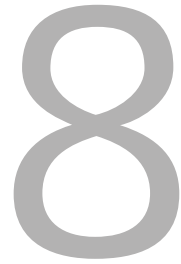h e a l t h   b a n d

Legal disclaimer

Some measurements require the installation of the HELO Smart App available for Android OS 5.0 and later and for Apple OS version 10.0 and later.

1. HELO BioSense has a water resistance rating of 50 meters according to ISO standard 22810:2010. Therefore, the device can be used for activities like swimming in a pool or the ocean. However, HELO BioSense should not be used for waterskiing, or other high-velocity water activities.

2. Unless otherwise specified, HELO BioSense and related services are not medical devices and are not intended to diagnose, treat, cure, or prevent any disease. Regarding accuracy, HELO has developed products and services to track certain wellness information as accurately as reasonably possible. The accuracy of HELO's products and services is not intended to be equivalent to medical devices or scientific measurement devices. It is in no way meant to be a replacement thereof. If you have any concerns, you should always consult a physician or a healthcare professional before replacing any medical product or service.

3. Consult your doctor before use if you have any pre-existing conditions that might be affected by your use of any HELO product or service.

4. Certain functions may be limited in some countries.

Helo

BioSense
h e a l t h   b a n d

8

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference.

2. this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna

• Increase the separation between the equipment and receiver

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

• Consult the dealer or an experienced radio/TV technician for help.

Helo

BioSense
health band

IC Requirement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation.

Helo

Thank you!