iSmarch J3-LoRa Smartwatch

The J3-LoRa Smartwatch is a rugged wearable designed for mission-critical environments. It combines LoRa / LoRaWAN multi-band connectivity, GPS, BLE 5.2, and comprehensive health monitoring—ideal for tracking, safety, and operational efficiency across global deployments.

J3（LORAWAN）+Heart Rate + Blood Oxygen+ Body Temperature + HRV(RRI) Smart Watch

Multi-Band LoRaWAN for Industrial IoT Excellence

Key features and highlights

Multi-Band LoRaWAN Connectivity

- Supports major regional frequency bands: EU868, US915, AS923, AU915, enabling seamless global deployment.

- Ensures long-range, low-power communication suitable for large-scale industrial, logistics, and safety applications.

Vital Health Metrics & Sensor Access

- Captures critical metrics: Heart Rate, SpO_2, Body Temperature, HRV (High-fidelity up to 500 Hz), Stress, along with activity and sleep data.

- Exposes raw PPG and accelerometer (G-sensor) data, offering full control and deep integration via SDKs.

Advanced Positioning

- GPS for precise outdoor tracking, augmented with BLE AOA capability for indoor localization when paired with gateways

Durable Design & Long Battery Life

- 600 mAh battery combined with low-power LoRa and Nordic nRF52840 architecture delivers multi-day operation.

- Industrial-grade robustness, built for rugged environments (heavy industry, logistics, mining, oil & gas). Customizable firmware and UI for integration flexibility.
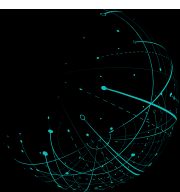
| FEATURE	HIGHLIGHT
Connectivity	LoRa/LoRaWAN multi-band (EU868, US915, AS923, AU915), BLE 5.2, GPS, SOS Button
Health Sensors	Heart Rate, SpO$_2$, Body Temperature, HRV (up to 500 Hz), Stress, Sleep, Activity
Raw Data Access	PPG & Accelerometer raw data available via SDK
Location Tracking	Outdoor via GPS; indoor via BLE AOA with gateway infrastructure
Battery & Power	600–650 mAh battery, optimized for extended uptime using low-power logic
Customization & Durability	Custom UI/Firmware, industrial build quality suited for harsh environments

Why Choose J3-LoRaWAN?

- Global Deployment Ready: Multi-band LoRa support removes regulatory barriers across regions.
- Rich Health Data & Insight: Ideal for safety and wellness monitoring in extreme conditions.
- Flexible Integration: Raw sensor data
- Robust & Dependable: Designed for reliability in demanding industrial and logistics scenarios.
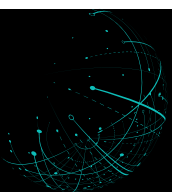
Sl No	Parameters	BLE5.2+LORAWAN(868MHZ & 915MHZ & 923MHZ ISM Band)+GPS	
1	**Product Features**	Blood Oxygen Saturation (SpO2)	Photoplethysmography (PPG) reflected light blood oxygen (red & light + infrared light)
		Body Temperature	Support
		Heart Rate	Support Static heart + dynamic heart rate
		Blood Pressure	Support (not allowed, used with caution, not responsible for accuracy)
		Heart Rate Variablity (HRV)	25 Hz sampling rate (customizable), supports broadcast and Bluetooth SDK/API data acquisition.
		Stress Level	Support (the higher the value, the greater the pressure, and vice versa) - HRV based algorithm
		Fatigue Monitor	Support (the data of the day before 8 a.m. every day) - algorithms based on heart rate / sleep / HRV
		Pedometer/Steps & Sleep Monitoring	Support
		SOS	Long-press key (5s) sends SOS to base station for cloud processing.
		Sensor Data(GSensor / PPG RAW Data)	Support
		With LoraWAN Gateway	1) Uploads vital signs and GPS data to the cloud via LoRa base station (default: 1 packet every 5 minutes). 2) Supports SOS alerts via LoRa gateway.

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2	**Basic Parameter**	Device size（mm）without strap	42.5*53*16.5mm
		Weight Device without strap	40g
		Weight strap	22g
		Body temperature function description	Wrist skin temperature sensor (36–42 ℃) with high thermal conductivity and built-in algorithm.
3	**Hardware parameters**	Chipset Supplier	NORDIC NRF52840+Semtech LORAWAN Module
		APP	IXFIT（Download at App Store or Google Play Store）For Testing
		App System reqirement	Android5.0 or Above/ IOS9.0 or Above
		FLASH memory	1MB FLASH
		Display type	TFT
		screen size	1.54nch
		Resolution	240*240
4	**Connection parameter**	Touch Type	2 physical keys (including SOS keys)--No Touch Key
5	**Sensor**	Bluetooth Version	Bluetooth 5.2
		G-Sensor	High-precision sensor, working with low power consumption
		Body Temperature	YES
		Blood Oxygen Saturation (SpO2) (PPG)	YES
		Heart Rate(PPG)	YES
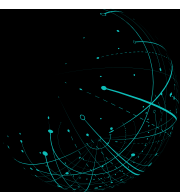
|			
6	**Battery**	Battery Type	Polymer lithium battery
		Capacity	600MAH
7	**Other Partmeter**	Charging Method	Magnetic charging
		Waterproof Level	IP68
		Charging time	5hours
		Battery life	7*24hours(Steps +Bluetooth+HeartRate Always on Without GPS and LORA)
		Strap colors	BLACK
		Material	Case: Plastic; Strap:Silicon
8	**Package Size**	Packing quantity （pcs）	100pcs
		Packing box size （L*W*H）MM	98*98*40mm
		Package weight（g）	140g(Including device+ strap + charging accessories)
		Carton box size （L*W*H）CM	510*420*230mm
		Carton weight(KG)	10.2

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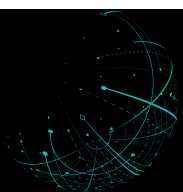
J3 Smart watch
User Guide

Thank you for choosing our products, please read the Guide before use

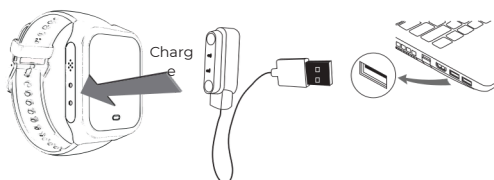1. Smart watch*1

Black button

Red
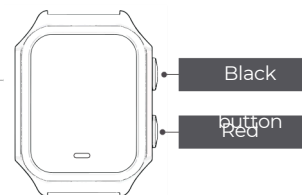
2. Manual*1

3. Charger*1

How to charge the

Charge

The specific charging steps are as follows: 1. Plug the USB plug of the charging cable into a USB port on your computer, a UL listed USB wall charger, or any USB charging port. 2. Use the magnetic device on the charging cable to attach it to the magnetic end of the bracelet. 3. Make sure the pins on the charging cable are securely connected to the ports and there is a battery progress bar on the screen while charging.

Battery management

This machine is powered by a built-in (non-removable) battery, and the battery indicator is

Indicates that the battery is fully charged。 When the battery indicator is displayed as

It means that the remaining power is insufficient, please charge it in time.

The smartwatch only needs 2 hours to fully charge.

Tim

bluetooth not connected bluetooth connected

Date — 08/01/2022

Tim — 10:15

Heart rate — 125 bpm

Body monitorin temperagre — 36.25 ℃

Step count — 19666 Steps

Batter y

Long press to enter/exit

SOS

SOS

Heart

Note: Monitor Mode is "Continuous Measurement Mode"

♥ Heart rate

Heart rate value

86 bpm

Click the button to open Monitor Mode

♥ Heart rate

86 bpm

Blood

Blood Oxygen

blood oxygen value

98 %

Click the button to open Monitor Mode

Blood Oxygen

98 %

Body

Body Temperature

Body temperature in degrees Celsius — 36.28 ℃

Body temperature Fahrenheit — 97.16 ℉

Body Temperature

36.28 ℃

97.16 ℉

Note: Double-click to switch Celsius/Fahrenheit, and the home page will switch

Body Temperature

Hi

Body Temperature

Lo

If the body temperature is higher than 42°C, the screen will display Hi If the body temperature is below 35°C, the screen will display Lo

Blood

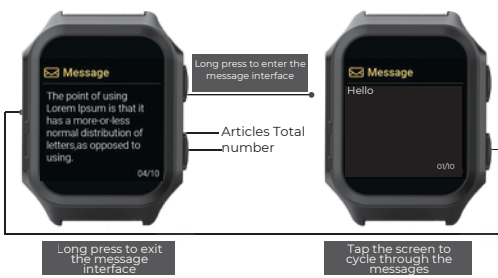Systolic blood pressure — **SYS 98** mmHg
Diastolic blood pressure — **DIA 64** mmHg

Blood Pressure

Respiratory

Respiration Rate

Respiratory rate times/min — **14** Times/min

informatio

Message

The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters,as opposed to using.
04/10

Long press to enter the message interface

Articles Total number

Message

Hello
01/10

Long press to exit the message interface

Tap the screen to cycle through the messages

User

User Information

Name ID — Name: Deborah Cla...
number — ID: 90053007
Group — Group: SG004
Card — Card: 04005567
number

Emotional

Stress Level
20 Relexed
Easy(0-30)

Stress Level
130 Moderate Relexed
Ease(31-50)

Stress Level
190 Anxiety
More anxious(51-70)

Stress Level
255 Anxiety
Anxiety(71-255)

Fatigue

Note: the smaller the value, the higher the fatigue

Fatigue Monitor
90
low fatigue

Fatigue Monitor
80
Moderate fatigue

Fatigue Monitor
70
High fatigue

MAC

Scan the QR code for easy entry

LORAWAN Mods Watch MAC address

Watch software version number

103
Version: 20190912
Mac: 86C5F42387C8

Region

Attention:
Key touch points after selection, shaking and restarting have an effect

Version: 20190912
Mac: 86C5F42387C8
Steps

Press and hold at the same time

Enter Region setting

Region setting
AS923
AU915
EU868
KR920
IN865
US915
RU864

Select Up
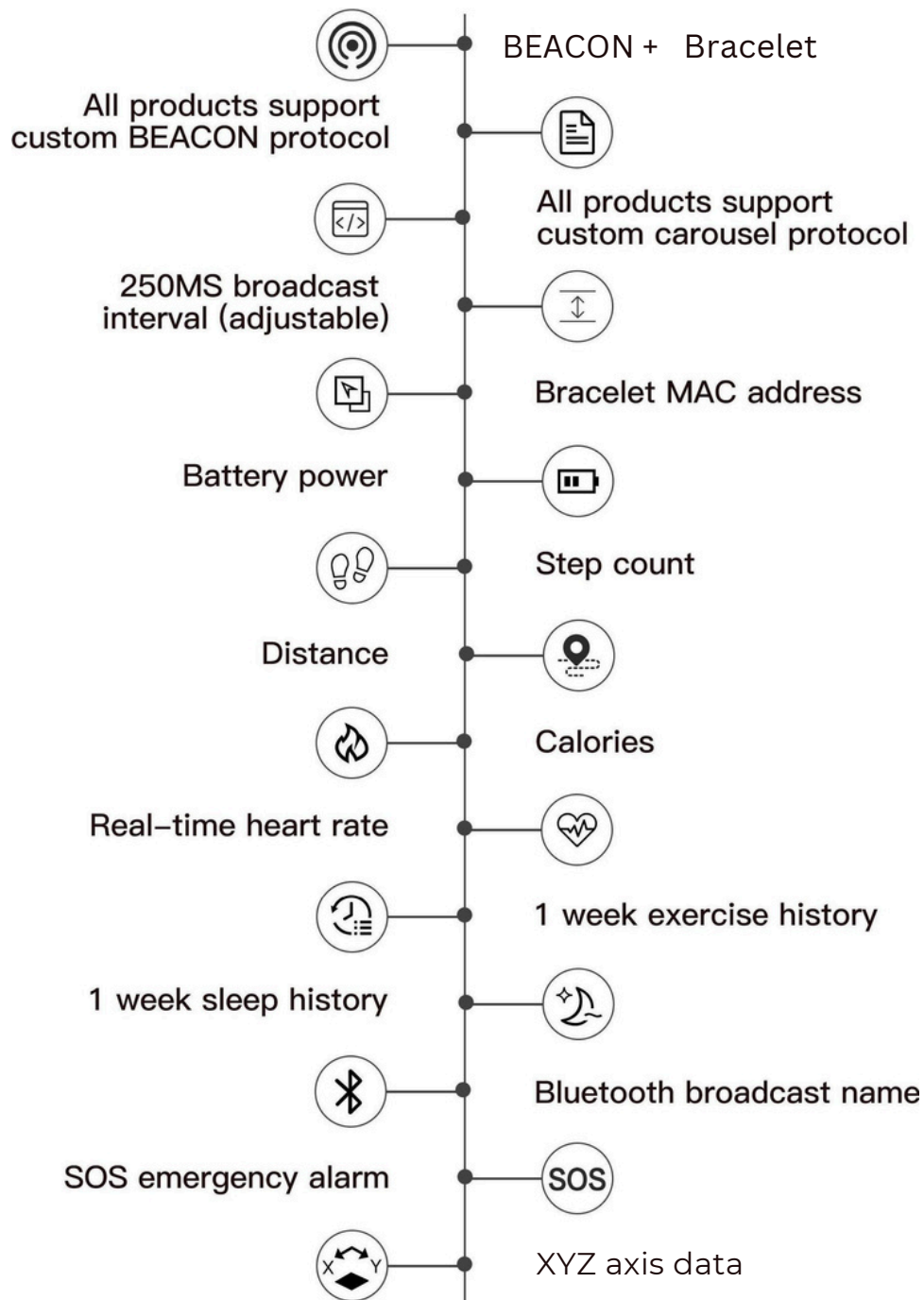
Two Hold Down - Exit and Restart

Select Down

Touch position

Precautions

1. Do not drop or collide with hard objects, otherwise it may cause the surface of the machine to be scratched, data loss or other hardware damage;

2. Do not attempt to disassemble or modify the machine, which will cause quality problems or hinder product warranty:

3. Do not use chemicals or cleaning agents to clean the bracelet,which will damage the surface of the machine and corrode the spray paint;

4. It is forbidden to use overloaded power supply for this product,anditis forbidden to bend or squeeze the power cord with heavy objects,so as not to cause heat and cause fire;

5. The watch battery is not removable, please do not remove the battery

Solutions

- BEACON + Bracelet
- All products support custom BEACON protocol
- All products support custom carousel protocol
- 250MS broadcast interval (adjustable)
- Bracelet MAC address
- Battery power
- Step count
- Distance
- Calories
- Real-time heart rate
- 1 week exercise history
- 1 week sleep history
- Bluetooth broadcast name
- SOS emergency alarm
- XYZ axis data

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