

















LoRaWAN® Smart GPS Watch for location tracking & SOS

The WLRC-SW1-L LoRa is an advanced wearable device offering unparalleled connectivity and precise location tracking through LoRaWAN technology. Designed for use in a variety of settings, from logistics to safety applications, the WLRC-SW1-L ensures that critical data is always been delivered.

KEY FEATURES

- Support the uploading of vital signs data to the cloud platform through Lora base station (the default sending frequency is: send 1 packet of data in 5 minutes, including vital signs and GPS positioning data) (uplink data)
- · Support SOS to report to the platform through LoRa Gateway
- Blood Oxygen Saturation (SpO2), Body Temperature, Heart Rate, Blood Pressure & Pedometer/Steps
- Seamless and secure transmission of location and health data for efficient monitoring
- IP rating: IP68

APPLICATION

- Mining Industry
- GPS Positioning
- Correctional Facility
- Asset Tracking
- Smart Campus
- Health Monitoring
- · Safety and Emergency Services
- · Sports Activities Monitoring
- Regional Positioning









SI No	PARAMETERS	DESCRIPTION	FEATURE
1	FEATURE	Blood Oxygen Saturation (SpO2)	Photoplethysmography PPG) reflected light blood oxygen (red & light + infrared light)
		Body Temperature	Support
		Heart Rate	Support Static & Dynamic heart rate
		Blood Pressure	Support (not allowed, used with caution, not responsible for accuracy)
		Heart Rate Variablity (HRV)	25Hz sampling rate (higher sampling rate can be customized) supports both broadcast data acquisition and Bluetooth SDK (API) acquisition
		Stress Level	Support HRV based Algorithm (higher the value, greater the pressure & vice versa)
		Fatigue Monitor	Support algorithms based on heart rate / sleep / HRV (data of the day before 8AM)
		Pedometer/Steps	Support
		Sleep Monitoring	Support
		SOS	Support. The long press of physical keys for 5 seconds to broadcast SOS = 1, which is received by the base station, and the cloud platform makes the corresponding processing mechanism
		Sensor Data(Gsensor/PPG RAWDATA)	Support
		LoRaWAN Communication Protocol	1. Support the uploading of vital signs data to the cloud platform through LoRa base station (the default sending frequency is: send 1 packet of data in 5 minutes, including vital signs and GPS positioning data) (uplink data) 2. Support SOS to report to the platform through LoRaWAN Gateway
2	BASIC	Device size (mm) without strap	42.5*53*16.5mm
		Weight Device without strap	40g
		Weight strap	22g
		Body temperature function description	Skin temperature detection. High thermal conductivity temperature sensor with built-in algorithm.the skin temperature of the wrist part Measurement range 36° ~ 42° Celsius
3	HARDWARE	Chipset Supplier	NORDIC NRF52840+Semtech LoRaWAN Module
		FLASH memory	IMB FLASH
		Display type	TFT
		screen size	1.54nch
		Resolution	240*240
4	CONNECTION	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	Heart Rate(PPG)	YES
6	BATTERY	Battery Type	Polymer Lithium battery
		Capacity	600MAH
8	OTHERS	Charging Method	Magnetic charging
		Waterproof Level	IP68
		Charging time	Shours
		Battery life	24~48 hours *Varies by reporting interval and other factors (Steps+Bluetooth+HeartRate Always on Without GPS and LoRa)
		Strap colors	BLACK
9	MATERIAL	Material	Case: Plastic; Strap:Silicon
10	DIMENSION	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

^{*}All logos & trade marks represent the registered users only. All rights reserved.

^{*}All product specifications on this brochure are subject to change without notice.



USA: 171 Cooper Ave. Suite 110 Tonawanda, NY 14150 USA Tel: 1-716-877-7277 Toll Free: 1-866-843-6865 MIDDLE EAST: PO Box No 126312 Office Suite 703 Oxford Tower Business Bay Dubai, UAE Tel: + 971 4 2767117