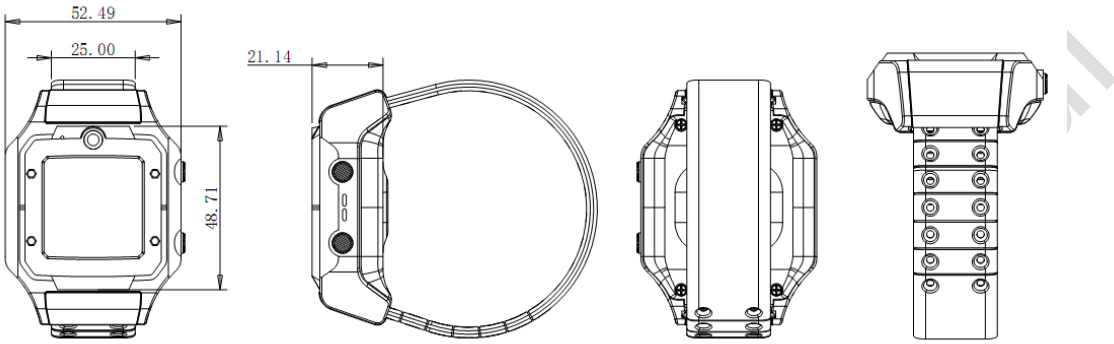
Tamperproof GPS watch
Datasheet

Catalog

Notice: The specific functions and performance of the watch vary according to the firmware and server software. This document is for reference only. Actual functions and working logic shall be subject to actual performance.

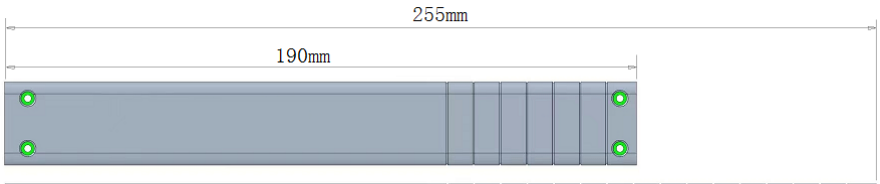
1. Specification



Main Chip	SL8521E(1.3GHZ)	Screen	1.3-inch TFT
	Dual-core ARM Cortex A53 processor	Memory	512M+4GB
Frequency Band(A)	FDD: Band2/4/5/7/12/17 GSM: Band 2/3/5/8 WCDMA2/4/5	Working Time	About 75 hours with 10 mins GPS interval.
Frequency Band(EU)	FDD: Band 1/3/7/8/20 LTE: Band 38/39/40/41 GSM: Band 2/3/5/8 WCDMA: Band 1/8		About 35 hours with 3 mins GPS interval.
			About 20 hours with 1 min GPS interval.
GPS Chip	SL8521E(1.3GHZ)	Android	4.4 Support open SDK
BDS/GPS Signal	1561.098MHz/L1 1575.42MHz C/A code	Healthy Detection	Heart Rate and Temperature optional GH3018+GXTS02S sensor
GPS Antenna	Highly sensitive ceramics active antenna	Waterproof	IP68 (See the Chapter 2.16)
GPS chip receive sensitivity	Tracking sensitivity:-165dBm	Average working current	<=45mA
	Capture sensitivity:-147dBm	Average standby current	<=3mA
Camera	2 million pixels	Watch Battery	1700 mAh (3.8V)
Wi-Fi	Wi-Fi 4 (802.11n) Support 2.4 Ghz	Power bank battery	2500 mAh (3.8V)
BLE	4.2	Working temperature	-10～55℃
Speaker+ Mic	Yes	Working humidity	5% to 95% non-congealable
Vibrate	Yes	Weight	The watch: 102 g The power bank: 92g
Shell material	Watchcase: PC Strap: Silicone + stainless steel	Size	Watch size:53*25*21mm Power bank size:60*68*35 mm

The watch has three kinds of replaceable watchbands. Different watchbands are used to form a tamperproof watch, a tamperproof ankle tracker and an ordinary detachable watch.

1. Short tamperproof watchband



2. Long tamperproof watchband

3. Ordinary watchband

2. User Manual

2.1 Appearance of the product

2.2 Preparation before use

1. Check whether the device model is correct and whether the accessories are complete.
2. Prepare a Nano SIM card that supports the 4G network. This card should not be bound to any other IMEI or mobile communication device, and it should not be a dedicated card or a contract card. For specific details, please refer to the advice of the SIM card supplier.

3. The SIM card needs to have the PIN code removed and should have SMS, call, GPRS, and caller ID functions activated.
4. Please turn off the device before inserting the SIM card. If you insert the SIM card while the device is on, please restart the device after inserting the card.
5. Please use the original 2pin charging cable and the original power adapter to charge the device. Do not use a fast-charging power adapter, as it may damage the battery. If you purchase a power adapter on your own, it should support a nominal voltage of 5VDC/1A and have obtained mandatory safety certification. If the power adapter you provide does not meet the mandatory safety certification requirements or exceeds the nominal parameters, there may be safety risks such as fire, electric leakage, and explosion. Any damage to the device caused by this will not be covered by the warranty.
6. Install the APP on the mobile phone or access the backend server. For details, please consult your dealer.

2.3 Charging

2.3.1 Charging with cable

The watch will be charged by connecting the cable to the magnetic contact .It could take 2-3 hours to fully charge. Please charge it when it shows low battery alert. The watch will send low battery alert to the tracking platform when the battery level is as low as 20%.

2.3.2 Charging with power bank

The watch can be charged with the power bank during wearing without removing it.

There is a clip on the side of the power bank that can spring back automatically. Hold the clip to cover the front of the watch with the power bank, make the pin of the power bank align with the contact on the side of the watch, and then loosen the clip, which will fix the power bank on the watch.

When the power bank is buckled on the watch, it starts to charge the watch. The green LED light will always be on during the charging.

Connect the Type-C cable to the power supply to charge the power bank. The red LED light will always be on during charging.

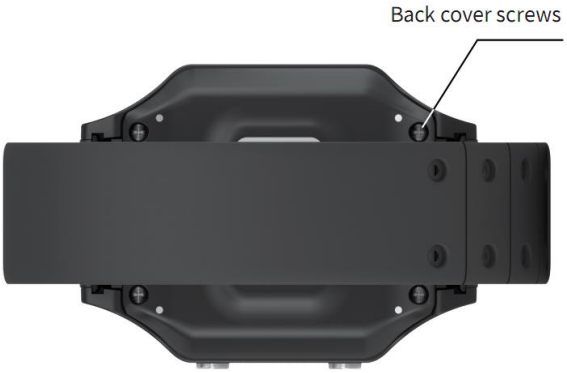
2.4 Install the SIM card

2.4.1 Open the back cover with cross screwdriver.

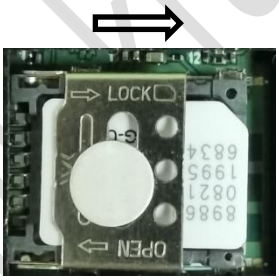
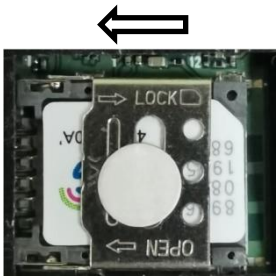
2.4.2 Install a Nano SIM.

2.4.3 Install the back cover and fasten the screws.

The SIM card should support 4G,and enabled with GPRS plan and balance. The watch might be damaged by install an off-standard SIM. Please contact your supplier.



If the SIM card cover is not fixed, the poor contact of the SIM card during use will affect the data transmission and reduce the security.

Slide the cover to the right to secure the SIM card	Slide the cover to the left to remove the SIM card
	

2.5 Power ON and power OFF

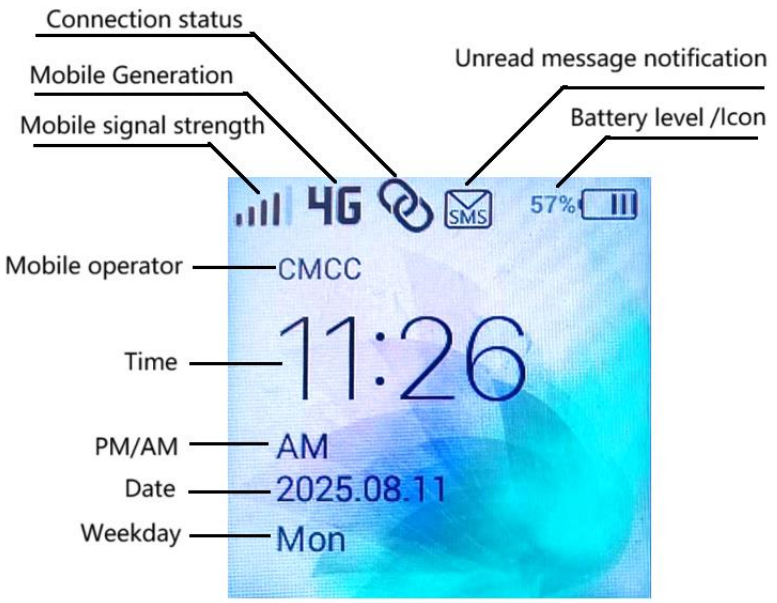
The watch would power ON automatically with charging cable connected.

Short press the top button for 1 second to power ON it.

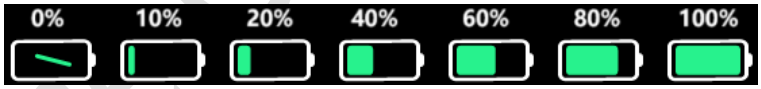
The watch can't be powered OFF by pressing button when there is SIM card installed. You can send a command to switch off the watch remotely. For specific command format, please refer to Chapter 3, Protocol and Command

Long press the button for 15 seconds to restart the watch. The watch would vibrate 1 time to tell it will be restarted.

2.6 Interface and key operation



The icon indicates the status of the device and its connection to the backend server. Please refer to the following table for specific instructions:

Remaining battery	
Charging power	
Network and signal level	
Server connection status icon	 No connection  Connecting to the server
New message	
Network connection status	 Getting GPS location  Wi-Fi connecting  BLE opening

2.7 Lock the strap and tamperproof alert

2.7.1 Process of lock the tamperproof strap

1.Wrap the strap around the wrist to measure the length of the strap.

2.Cut off the excess strap with the scissors.

3.Wear the watch on the wrist and fasten the two ends of straps with special screws. When you lock the strap with two special screws, there will display “Wristband has been worn” on the watch, meanwhile there is an “Strap Locked” alarm triggered on the tracking platform.

4.Cover the both screw covers.

2.7.2 Tamperproof alert

When the strap is opened or damaged, the watch will pop up a red warning alarm icon and play alarm tone to remind the wearer, and meanwhile there is a 'Tamper alarm' triggered on the tracking platform.

If you do not want the watch to play the alarm tone, you can send a command to turn off the alarm tone remotely. For specific command format, please refer to Chapter 3, Protocol and Command.

When using a regular watch strap, firmware without anti tamper alarm function can be used in combination, so that opening or closing the strap will not cause similar alarms from the watch.

2.8 Connection and network

The watch supports wired and wireless data connections.

2.8.1 GPRS

The watch can connect to the network through GPRS of the SIM card, and send data to the server through TCP protocol. It works with 2G/3G/4G network. If the feedback packet sent by the server is not received within the scheduled time, the watch will try to re-read the SIM card or try to restart to regain the network connection.

The APN configuration information of major global operators has been stored in the standard firmware of the watch. When the watch detects the SIM card, it will read the MCC and MNC from the SIM card, find the matching APN configuration information to complete the automatic configuration of APN. If the matching APN configuration information cannot be found, you need to manually configure the APN. Besides SMS and GPRS commands, APN can also be configured through Bluetooth App. Please refer to the Bluetooth App User Guide for details.

2.8.2 Wi-Fi

The device supports network communication via Wi-Fi connection. You can set Wi-Fi connection parameters through SMS or GPRS commands. For specific command format, please refer to Chapter 3, Protocol and Command.

In the default firmware version, when the network connection is disconnected, the device will only try to reconnect through 4G, not through Wi-Fi. However, the customized firmware can try to reconnect through Wi-Fi.

2.8.3 BLE

The device supports network communication through BLE.

1. The device can be paired with a mobile phone for communication.

2. The device can search for surrounding Bluetooth MAC addresses and upload them to the server. The default firmware version only turns on the Bluetooth module within 30 minutes after booting up. But it can be set to keep Bluetooth on through SMS or GPRS commands.

3. The device support customize firmware to broadcast its own MAC address for other devices to discover it.

2.8.4 Cable

The watch supports communication with computers or testing equipment through data cable. You can send AT commands or flash firmware through a data cable. Pressing two keys simultaneously can force the flashing of the device

2.9 Tracking

2.9.1 GPS+Wi-Fi tracking

The watch supports GPS,AGPS,Wi-Fi ,LBS and Beacon for indoor and outdoor tracking. The default tracking priority is GPS>Wi-Fi>LBS.

The tracking process is to search GPS for maximum 90 seconds to get and report GPS location. The watch would send Wi-Fi , LBS location data with the GPS tracking data.

The watch supports real-time tracking. By issuing commands, the watch can immediately try to obtain and upload tracking data. For specific command format, please refer to Chapter 3, Protocol and Command.

As an optional solution, we support customize the firmware to integrate third-party network positioning SDK in watch ,and return coordinate directly indoors and in places with poor GPS signals. The accuracy is better than using Wi-Fi or LBS only .

The watch also supports other positioning modes, such as only using Wi-Fi for positioning. See the IW protocol for the specific setting method.

In order to ensure that the location data is not lost due to network connection, there is a supplementary transmission mechanism for the location data. If the location data is not sent to the server, it will be automatically saved in cache and will be uploaded when the network connection is restored and there are no transfer tasks. If the watch does not receive any data packet feedback from the server within 5 seconds after uploading a location data, the watch will attempt to upload again, with a total of 5 attempts. If all attempts fail, the watch will discard the data packet at that location.

The amount of historical data saved in cache depends on the storage situation, usually more than 1000 pieces of data will be saved, so the time for uploading data will also be relatively long.

2.9.2 Beacon tracking

In order to demonstrate the Bluetooth beacon positioning function, the watch supports searching and collecting the surrounding BLE beacon MAC and reporting it to the backend server. By default, the watch only reports the BLE beacon MAC every 2 minutes within 30 minutes after power on. The watch can upload BLE MAC continuously through command configuration. See IW protocol document for specific data format.

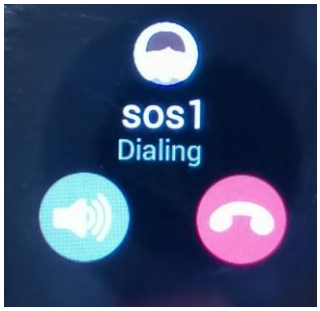
2.10 SOS alert

The watch supports switch ON/OFF SOS alert by GPRS command.

With SOS enabled, the wearer could press the SOS button for 3 seconds to trigger an SOS alert. The watch will vibrate for one second and send ‘SOS alert’ data with latest location to the tracking server.

After sending the ‘SOS alert’ data, the watch will start SOS call process. It will make phone call to the first SOS number for three times until the call is answered. If no answer or SOS button was pressed again to cancel the outgoing call, it will try to call all the other SOS numbers by turns.

If the SOS is enabled but the SOS number has not been set, the watch will display "No SOS number. Setup now". See Chapter 3, Protocol and Command for the method of setting SOS number.



2.11 Phone call

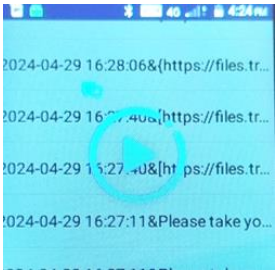
The watch can answer calls. The SIM card calling function in the watch is required. When the watch shows that there is an incoming call, click the upper key to answer the call. You cannot reject the call by pressing the key. After the call is connected, click the Up button to end the call.
The watch supports the white list function, through which you can only filter trusted numbers for calls. See Chapter 3, Protocol and Command for the detail function of white list function.

2.12 Camera

The watch supports remote photographing according to GPRS command. See IW Protocol for the detail function of photo function.

2.13 AI nortification

The watch supports receiving and automatically playing the multimedia notification data sent by the server. Multimedia notifications include picture, text and audio messages. When the administrator inputs words in a certain language on the server side, the AI module (artificial intelligence) integrated in the server converts them into voice messages in the corresponding language and issues them to the watch. The watch will automatically play the received voice message without any operation by the wearer.

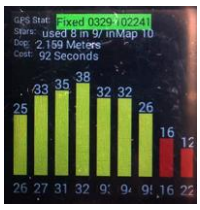
Photo message	Text message	Voice message
		

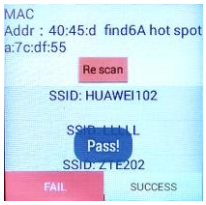
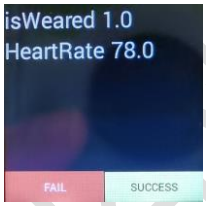
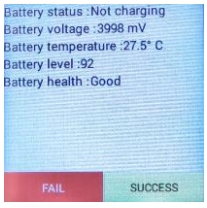
2.14 Distance alert

The system manager configures the Offender(Target) and their Victims(Guardian).The system would release alert to both sides when some offenders close to a victim. The offender and victim's watches show distance alert. The system would show distance alert and location of both offender's and victim's watch.

2.15 Side button and engineering mode

The following are the engineering mode of the watch which could help you to test a potentially malfunctioning watch and fix it. The wearer only needs to wear the watch and does not need to perform these operations.

Press button	Example
Press the top button for 1 time to light up the screen.	
Press the top button for 1 or 2 times to check the latest SMS or GPRS message.	 
Press the top button for 3 times to reserved function.	
Press the top button for 4 times to check the IMEI number and the firmware version of the watch.	
Press the top button for 5 times to check the GPS tracking function. Please conduct GPS test in the outside with open sky and away from buildings. If the watch has not successfully obtained a GPS location for a long time, the watch will use the Cold start to search for the GPS signal. The watch displays "Not fixed" to indicate that GPS positioning has not been obtained. The watch will take 1-3 minutes to complete GPS positioning, so please wait longer until it displays "Fixed". The GPS position data obtained in engineering mode will not be uploaded to the backend server.	 

Press the top button for 6 times to scan Wi-Fi, it will show the list of the surrounding Wi-Fi hotspot. This function only tests whether the Wi-Fi module works normally. Wi-Fi connection cannot be established and Wi-Fi location data will not be uploaded	
Press the top button for 7 times to test ACC sensor.	
Press the top button for 8 times to test Optical /Heartrate/Blood pressure sensor. The health data obtained in engineering mode will not be uploaded to the backend server.	
Press the top button for 9 times to test temperature sensor. The temperature data obtained in engineering mode will not be uploaded to the backend server.	
Press the top button for 10 times to check the backend server IP and Port and the sim card info.	
Press the top button for 11 times to test camera. The photo catch in engineering mode will not be uploaded to the backend server.	
Press the top button for 12 times to check battery information.	
Press the top button for 13 times for reserved function.	
Press the top button for 14 times to reset the device to factory settings. If the watch has read the sim card, you can't reset the watch in this way.	 

Press the top button for 15 times for reserved function.	
Press the top button for 16 times to power off the watch, if the watch has read the sim card, you can't power off the watch in this way.	 
Keep press the button for more than 15 seconds to reboot it.	

2.16 Waterproof

The watch is splash,water and dust resistant and were tested under controlled laboratory conditions with a rating of IP68 under IEC standard 60529.It survived 30 minutes submerged in 3m of clean water.
Splash, water and dust resistance are not permanent conditions and resistance might decrease as a result of normal wear.Liguid damage not covered under warranty.
Please avoid these to prevent liquid damage:

1.charging a wet watch.

2.Swimming or bathing in warm water with the watch.

3.Exposing the watch to pressurized water or high velocity water,such as when showering, water skiing, wake boarding,surfing, jet skiing, and so on.

4.Using the watch in a sauna or steam room.

5.Intentionally submerging the watch in water

6.Operating the watch outside the suggested temperature ranges orin extremely humid conditions.

7.Dropping the watch or subjecting it to other impacts.

8.Disassembling the watch, including removing screws or force open the back cover.

9.Users should also minimise the watch exposure to soap, detergent acids or acidic food and any liguids like perfume,insect repellent,lotions, sunscreen,oil, adhesive remover, hair dye and solvents.

2.17 Safety, operation and support

Warning
When using the device, please comply with the laws and regulations in your area. Not following these safety instructions may result in fire, electric shock, injury, or damage to equipment or other property. Before using the device, please read all the security information below.
Operation
The device contains highly sensitive electronic components, which can be damaged by dropping, burning, puncturing, or crushing. Do not use damaged devices, such as cracked screens, obvious water ingress, or damaged watch straps, as they may cause injury. Avoid prolonged exposure to sand and dust.
Phone call
The calling function requires a SIM card that supports calling. Do not use the call function while performing other activities that require full attention.
Repair
Do not open the device and attempt to repair it yourself. Dismantling the equipment may cause damage, render it no longer waterproof, and may result in injury to you. If the device is damaged or malfunctioning, please contact the dealer or their authorized service provider.
Battery
Do not attempt to replace the built-in battery of the device by yourself. You may damage the battery, causing

overheating and personal injury. The maintenance service of lithium-ion batteries in the equipment should only be provided by dealers or their authorized service providers. Batteries must be recycled or disposed of separately and cannot be mixed with household waste. Do not burn the battery.

Distraction

In certain situations, using devices can distract your attention and may pose a danger. Please comply with the relevant regulations prohibiting or restricting the use of mobile phones (such as avoiding texting while driving and using dialing functions).

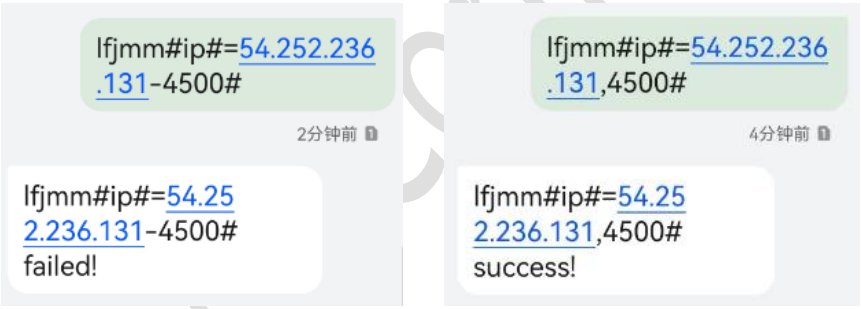
Tracking

This application relies on data services. These data service signals are subject to change at any time and may not be available in all areas, so the positioning information provided in some locations with poor signals may be unavailable, inaccurate, or untimely.

3. Protocol and command

SMS commands refer to a series of specific commands that a watch can execute by receiving SMS without connecting the server. These commands are released from the watch manager by sending SMS (Short Message Service) to the watch SIM card through their mobile phone. The SIM card of the watch should support SMS and have enough balance, and the watch firmware will decode and execute commands.

The SMS command format is "password#Command ID#" or "password#Command ID=parameter#". The firmware of the watch will check the password. For SMS messages with the correct password, the watch will execute the command and reply with the execution result via SMS.

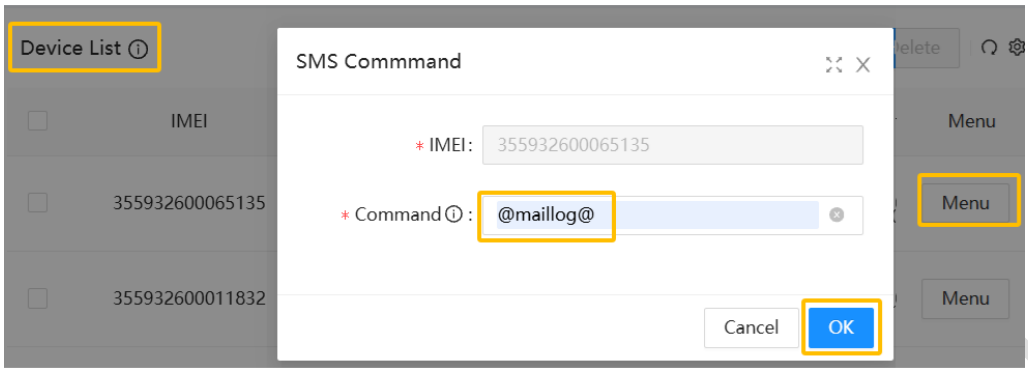


For SMS with incorrect password, the watch will not execute any instructions. Some watches will play short ringtones to remind users of password errors, while others will display incorrect instructions on the information interface.

For SMS messages with incorrect command formats, watches with screens will display the command on the information interface.

GPRS command refer to a series of specific commands that a server sends to a watch through wireless communication networks such as GPRS/4G/Wi-F. The GPRS commands content format is "@Command ID@" or "@Command ID=parameter@". The comma ',' in the parameter should be replaced by a dash '-'. The parameter should not include '@' or '#'.The GPRS command does not verify passwords. Pls check 'IW protocol-24.GPRS command (Downlink ID:BPSM, Response ID:APSM)' for the format of whole command.

For more commands and data package formats, see IW protocol document.

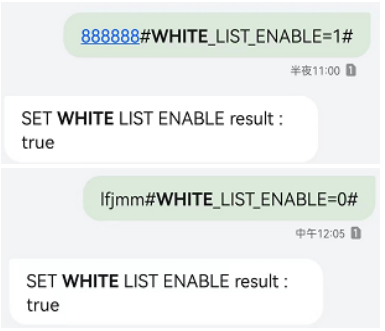
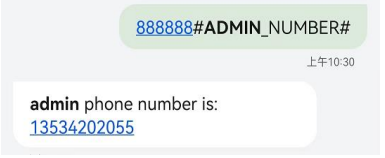


3.1 Password management

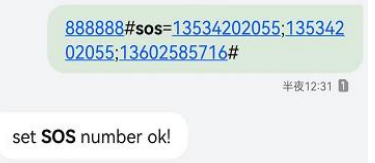
Command format	Description	Example
SMS command format Password#PW=Newpassword# GPRS command format @PW=Newpassword@	The command ID is PW; The password should be six letters or numbers; The initial password is lfjmm; The watch is supposed to reply with 'SET SMS PW ok +New password'.	lfjmm#PW=888888# 半夜12:12 SET SMS PW ok 888888 GPRS command: @PW=123456@ The GPRS reply is: IWAPSM,680835,SET SMS PW ok 123456#

3.2 White list management

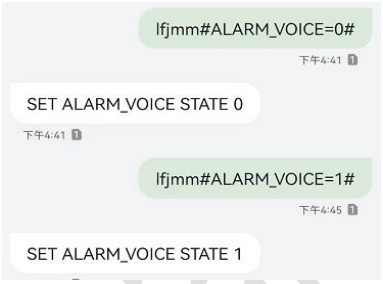
Command format	Description	Example
SMS command format Password#WHITE_LIST= Whitelistname1-Phonenumber1, Whitelistname2-Phonenumber2, Whitelistname3-Phonenumber3# GPRS command format @WHITE_LIST= Whitelistname1 -Phonenumber1, Whitelistname2-Phonenumber2, Whitelistname3-Phonenumber3@	The command ID is WHITE_LIST; Setting white list number and its name; The first white list number will be admin number; The watch would only answer the incoming call from white list; The white list is no more than 10 numbers; The watch is supposed to reply with 'SET SMS WHITE LIST ok+ Quantity of White list'.	lfjmm#WHITE_LIST=test1-13534202055,test2-13691793247# 晚上9:53 SET SMS WHITE LIST ok 2

SMS command format Password#WHITE_LIST_ ENABLE =Parameter# GPRS command format @WHITE_LIST_ENABLE =Parameter@	The command ID is WHITE_LIST_ENABLE; Enable or disable the white list function. The watch would only answer the incoming call from white list with white list enabled. It would answer all incoming call from any phone number with white list disabled; Parameter=1 means enable; Parameter=0 means disable; The watch is supposed to reply with 'SET WHITE LIST ENABLE result: true/false'. The whitelist function also applies to SMS commands. If only the whitelist number is set and the whitelist switch is not turned on(Parameter=1), any number can make device calls, but only SMS commands sent by whitelist numbers will take effect. Messages sent from other non-whitelist numbers will be displayed but not executed. If a whitelist number is set and the whitelist switch is turned on (Parameter=1),the device would only accept phone call and SMS command from whitelist numbers. Other phone numbers cannot be dialed, and the text messages will only be displayed and not executed.	 GPRS command: @WHITE_LIST_ENABLE=1@ The GPRS reply is similar to that of SMS reply: IWAPSM,680835,SET WHITE LIST ENABLE result : true#
SMS command format Password#ADMIN_NUMBER# GPRS command format @ADMIN_NUMBER@	The command ID is Admin_Number; The watch would reply admin number command from any phone number; The watch is supposed to reply with: 'Admin phone number is:+The admin number'.	

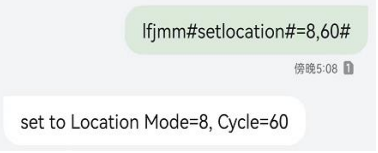
3.3 SOS number management

Command format	Description	Example
SMS command format Password#sos=SOSnumber1; SOSnumber2;SOSnumber3# GPRS command format @sos=SOSnumber1; SOSnumber2;SOSnumber3@	The command ID is SOS; Setting SOS number. The watch is supposed to reply with 'Set SOS number ok! '; The watch would dial all SOS phone numbers in turn, and upload GPRS SOS alert with latest location by pressing the SOS button; The dialing will be repeated for three times until a call is connected or the SOS button is pressed again to cancel the SOS process.	 GPRS command: @sos=64812855;+852648128552855;85264812855@ The GPRS reply is similar to that of SMS reply: IWAPSM,680835,set SOS number ok!#

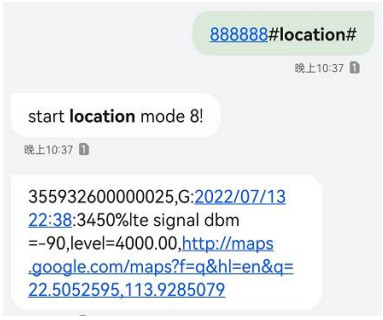
3.4 Alarm voice switch

Command format	Description	Example
SMS command format Password#ALARM_VOICE=Parameter# GPRS command format @ALARM_VOICE=Parameter@	The command ID is ALARM_VOICE; Enable or disable the alarm voice and vibration. The watch would play alarm voice and vibration for tamper alert with alarm voice enabled; Parameter=1 means enable; Parameter=0 means disable; The watch is supposed to reply with 'SET ALARM_VOICE STATE: true/false'.	 GPRS command: @ALARM_VOICE=0@

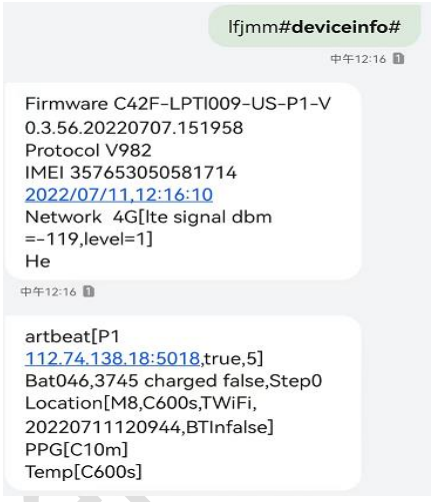
3.5 Working mode and GPS interval management

Command format	Description	Example
SMS command format Password#setlocation#=Mode,Parameter# GPRS command format @setlocation@=Mode,Parameter@	The command ID is SETLOCATION; Configure the working mode and GPS upload interval; Mode=8 means GPS location takes precedence over WiFi location; The watch would try to search GPS signal for 90 seconds then upload GPS location for success, or upload the last WiFi location for failed; The parameter for define the upload interval of GPS location. The unit is second; The watch is supposed to reply with 'Set to Location Mode=value, Cycle=value'.	 GPRS command: @setlocation@=8-5@

3.6 Check location

Command format	Description	Example
SMS command format Password#location# No GPRS command	The watch is supposed to reply with 'Start location mode value!+IMEI+ location time +battery level+ GPRS signal+network level+Google map link'; Mode=8 means GPS location takes precedence over WiFi location.The watch would try to search GPS signal for 90 seconds then upload GPS location for success. If the watch inside the building, it will return the last GPS location storage in CACHE, it may not be accurate.	

3.7 Reviewing the watch status

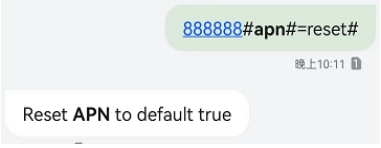
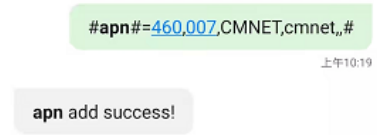
Command format	Description	Example
SMS command format Password#deviceinfo# No GPRS command	The command ID is DEVICEINFO; The watch is supposed to reply with watch's information, such as working mode, time interval of GPS tracking, the last time of location, etc.	

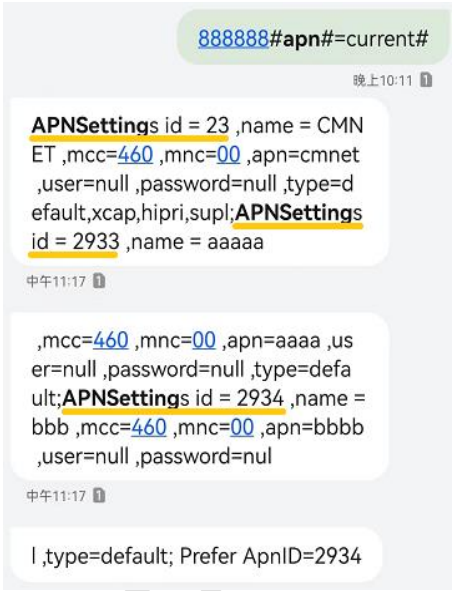
Contents of reply SMS	Description
Firmware C42F-LPTl009-US-P1-V0.3.56.20220707.151958	The version of watch firmware.
Protocol V982	The version of communication protocol implemented to the watch
IMEI 357653050581714	IMEI No. assigned to the watch.
2022/07/11,12:16:10	The time of reply the command.
Network 4G[lte signal dbm =-119,level=1]	The current network is 4G, the signal level of 4G is 1 (The best signal is 5).
Heartbeat [P1112.74.138.18:5018,true,5]	The server IP for uploading the heartbeat values; The value "true" means connected to the tracking server successfully; The value "5" means heartbeat uploading interval is 5 minutes.
Bat046,3745 charged false, Step0	Battery level and pedometer value; The value "046" means the battery level is 46%; The value "3745" means the voltage value is 3.745v; The value "0" means the pedometer is 0 steps.
Location [M8,C600s,TWiFi, 20220711120944,BTInfalse]	The value "M8" means the watch is working in tracking mode 8. The value "C600s" means location data uploading interval is 600 seconds; TWiFi means the tracking way of last location is WiFi; The value"20220711120944"is location time of the last location.It is 2022-07-11 12:09:44; BTInfalse is undefined for 4G watch.
PPG[C10m]	Heart rate detection interval;

or PPG[C5,P64,H108,L70,T31.00, TA35.55,20200225230645]	C0m means the watch don't support heart rate detection; The value "C10" means the heart reat uploading interval is 5 mins; The value "P64" means the value of heart rate is 64; The value "H108" means the high pressure of blood pressure is 108; The value "L70" means the low pressure of blood pressure is 70; The value "T31.00" means the wrist temperature is 31.00 degrees Celsius; The value "TA35.55" means the body temperature is 35.55 degrees Celsius; The value " 20200225230645" means the heart rate and temperature data detection time is 2020-02-25 23:06:45.
Temp[C0s] or Temp[C600s]	Temperature detection interval; The value "C0s" means the watch don't support body temperature detection; The value "C600s" means the temperature data uploading interval is 600 seconds;

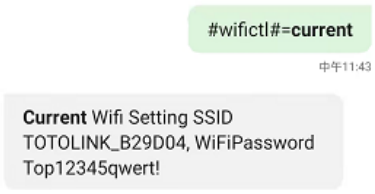
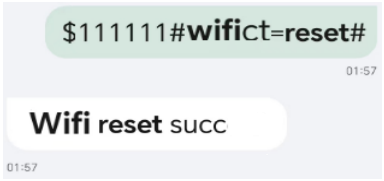
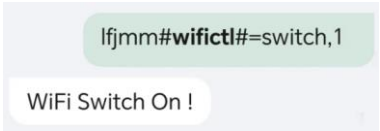
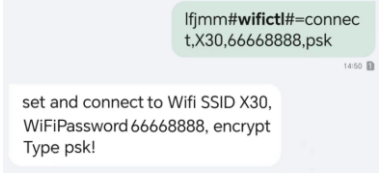
3.8 Setting up APN

The APN configuration information of major global operators has been stored in the standard firmware of the watch. When the watch detects the SIM card, it will read the MCC and MNC from the SIM card, find the matching APN configuration information to complete the automatic configuration of APN. If the matching APN configuration information cannot be found, you need to manually configure the APN. Besides SMS and GPRS commands, APN can also be configured through Bluetooth App. Please refer to the Bluetooth App User Guide for details.

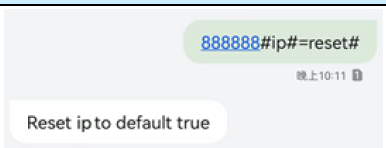
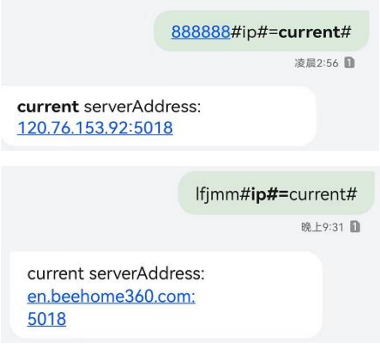
Command format	Description	Example
SMS command format Password#apn#=reset# GPRS command format @apn@=reset@	The command ID is APN; Reset the APN configuration to default value; The watch is supposed to reply with 'Reset APN to default true/false'.	
SMS command format Password#apn#=MCC,MNC,ApnName,apn,user,password# GPRS command format @apn@=MCC,MNC,ApnName,apn,user,password@	The command ID is APN; Configure and enable a new APN parameter,or enable an existing APN parameter which is already in the firmware; The watch is supposed to reply with 'apn add success!'; Repeatedly setting the same APN parameters may cause the watch to reply with ERROR reminder SMS.	 GPRS command: @apn@=234,50,TM,TM,,@

SMS command format Password#apn#=current# No GPRS command	The command ID is APN; Check the existing APN saved in watch firmware; The watch is supposed to reply with the APN which are matching the current MCCMNC. It won't list all APN parameters; Every APN parameter start with APN Settings ID such as 'APNSettings id=23'.	

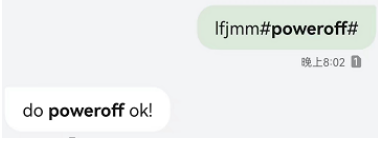
3.9 Wi-Fi management

Command format	Description	Example
SMS command format Password#wifictl#=current No GPRS command	The command ID is WIFICTL; Check the current Wi-Fi configuration; The watch is supposed to reply with Current Wifi Setting SSID,WifiPassword	
SMS command format Password#wifictl#=reset GPRS command format @wifictl@=reset	The command ID is WIFICTL; Reset the Wi-Fi configuration to default value; The watch is supposed to reply with 'Reset Wifi reset successfully /failed'.	
SMS command format Password#wifictl#=switch,Value GPRS command format @wifict@=switch,Value	Wi-Fi module switch.Set the Value as 1 to open Wi-Fi module and set 0 to close it. The watch is supposed to reply with 'Wifi Switch On/OFF'.	
SMS command format Password#wifictl#=connect,SSID,Password,EncryptType GPRS command format @wifictl@=connect,SSID,Password,EncryptType	Configure the Wi-Fi connection; The EncryptType value can be the following: psk,wep,aes,etc. You need send this command to switch ON the Wi-Fi module first, otherwise the set Wi-Fi may not be effective: Password#wifictl#=switch,1	 GPRS command: @wifictl@=connect-X30-66668888-psk

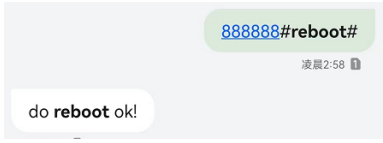
3.10 Setting up server IP

Command format	Description	Example
SMS command format Password#ip#=reset# GPRS command format @ip@=reset@	The command ID is IP; Reset the server IP as factory settings; The watch is supposed to reply with Reset ip to default true/false	
SMS command format Password#ip#=IP:PORT# GPRS command format @ip@=IP:PORT@	The command ID is IP; Set up server IP and port, support domain name; The watch is supposed to reply with 'Password#ip#= IP:PORT#success/fault!'	 GPRS command: @ip@=121.37.252.13:4500@ or @ip@=node.5gcity.com:4500@
SMS command format Password#ip#=current# No GPRS command	The command ID is IP; Check the existing server IP saved in watch firmware; The watch is supposed to reply with Current server Address: IP:PORT.	

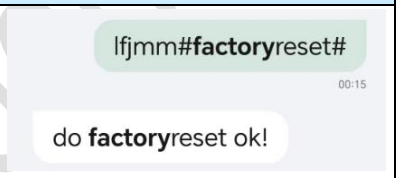
3.11 Power OFF

Command format	Description	Example
SMS command format Password#poweroff# GPRS command format @poweroff@	The command ID is POWEROFF; Power OFF the watch remotely; The watch is supposed to reply with 'do poweroff ok!' then execute the command.	

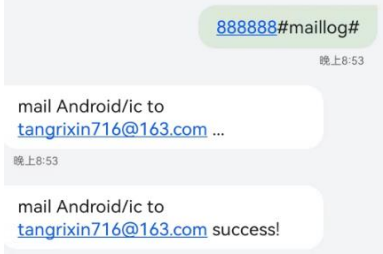
3.12 Reboot

Command format	Description	Example
SMS command format Password#reboot# GPRS command format @reboot@	The command ID is REBOOT; Restart the watch remotely; The watch is supposed to reply with 'do reboot OK!' then execute the command.	

3.13 Back to the factory

Command format	Description	Example
SMS command format Password#factoryreset# GPRS command format @factoryreset@	The command ID is FACTORYRESET; Restore the watch to factory settings remotely; The watch is supposed to reply with 'do factoryreset OK!' then execute the command.	 GPRS command: @factoryreset@

3.14 Mail the watch log

Command format	Description	Example
SMS command format Password#maillog# GPRS command format @maillog@	The command ID is MAILLOG; Send the log of Watch by mail; The Watch is supposed to reply with 'mail Android/ic to mailbox…' then execute the command; The Watch would reply with 'mail to mailbox success!' after all the log be sent.	 GPRS command: @maillog@