

Smart lock operation instructions (V1.2)



One. Introduction:

The smart logistics lock is a combination of RFID, GPS/Beidou positioning, radio frequency technology and electronic smart locks, combined with satellite positioning technology, wireless transmission technology, BSL positioning, etc., to design a highly integrated intelligent electronic lock. The smart lock has the function of unlocking only at designated locations and designated IDs, alarms for illegal unlocking, and remote unlocking.

Smart logistics locks are mainly used in logistics, which can further strengthen the capabilities of the logistics monitoring system, especially to strengthen the supervision of vehicles (including box trucks and container transportation) in transit, and use high-tech smart electronic locks. Instead of the current simple sealing, combined with bayonet equipment, tally reports, release information, deployment control and monitoring equipment, the entire process of (in transit) monitoring of the means of transport is implemented to supervise the opening and closing status of the doors. The intelligent logistics lock is used in conjunction with the GPS system and the gateway equipment system to read and collect the lock information in the supervision system, which can prevent counterfeiting, timely reporting, detection and prevention of unloading, theft, etc. during cargo transportation, and cooperate with management personnel , Play a role in supervising the safety of logistics.

two. Main product features:

- 1、 Built-in GPS module or Beidou module,
- 2、 Support 2G or 3G (WCDMA) or 4G network
- 3、 Use RFID electronic tags, support RFID card unlocking function
- 4、 Using high-strength plastic molds, the lock body is not easy to be damaged, and an alarm signal will be provided after passive damage, which can prevent falling, shock, water and dust.
- 5、 High-capacity battery, up to 15000MHA, can be connected for up to 7 days
- 6、 Built-in strong magnet, can make the lock firmly attached to the car body
- 7、 With low power alarm function, when the power is lower than a certain value, the indicator light will light up
- 8、 With buzzer reminder function, when the lock is not properly locked, the terminal will automatically buzzer to remind the driver
- 9、 The terminal has an anti-theft reminder function, and the terminal will actively alarm when the lock wire is illegally cut
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- 19、 GPRS communication mode The terminal automatically enters the GPS positioning mode every time it is powered on, using TCP/IP and UDP protocols,
- 20、 Relevant logistics lock information can be configured remotely.
- 21、 Positioning information, switch status, electronic lock instant information, etc.
- 22、 Monitoring center remote authorization unlocking, RFID card unlocking, APP unlocking, SMS unlocking, etc.
- 23、** The monitoring center can regulate the logistics walking route according to the pre-set location range, vehicle overtime, and route. If there is a violation, it will be reported to the monitoring immediately.

three. Product appearance/technical parameters:



1. Detailed product parameters:

Hardware features		Remarks
Hardware architecture	Adopt STM32	
Communication module	GPRS, WCDMA	
Technical specifications		
Operating Voltage	3.7 V/DC	
Average working current	170 (2G)	
RFID	S70	
spare battery	15000mAh works continuously for 7 days	
Dimensions	210*110*37 mm	
Outer packaging	Single unit: 22.9*19.8*6.1CM Large box: 64*24.6*41.6cm (20 sets per box)	
Host weight	880g (net) 1200g (gross weight)	
Environmental characteristics		
Temperature characteristics	Working temperature -40 °C ~ +75°C	
humidity	5% ~ 95% non-condensing	
GPS performance		
Sensitivity	-159dBm	
Positioning time	Cold start is less than 34 seconds; hot start is less than 3.5 seconds; warm start is less than 33 seconds, recapture time 1.0 second	
positioning accuracy	10 m	
Speed accuracy	0.1 m/s	
2G GSM/GPRS performance		
frequency	850/ 900/ 1800/ 1900 MHz or 2100, 900, 1900, 850	
Transmit power	Class 4 (2W @ 850/ 900 MHz) Class 1 (1W @ 1800/1900MHz)	
Operating temperature	-40 ° C to +85 ° C	
data storage		
Blind zone supplementary report cache	Cache 10,000 (point) positioning information	

2. Description of host LED light status:

1. Green LED---indicating GPS signal status

status	definition
Fast flashing (flashing once)	Searching for GPS signals.

every 1 second)	
Slow flashing (flashing once every 5 seconds)	Targeted

2. Red LED---indicating GSM status

status	definition
Fast flashing (flashing once every 1 second)	Cannot read SIM or GSM module
Slow flashing (flashing once every 3 seconds)	There is a GSM signal and the card has been read
Crazy flash (2S flash in 0.2 seconds)	Upload data to the server

3. Orange LED---indicating charging status

status	definition
not bright	noChargeElectricity
Chang Liang	The main power is connected, charging

4. Yellow LED---undervoltage indication status

status	definition
not bright	Power is normal or no power
Chang Liang	The machine is currently under voltage

5. Blue LED---charging end indication state

status	definition
not bright	No charge
bright	Charging is almost over (the orange light and blue light are on together)
Chang Liang	Charging is over (only blue lights)

4. Main parts and accessories:

1. One host of logistics lock
2. A charger
3. One chain line
4. Warranty card
5. Certificate of conformity

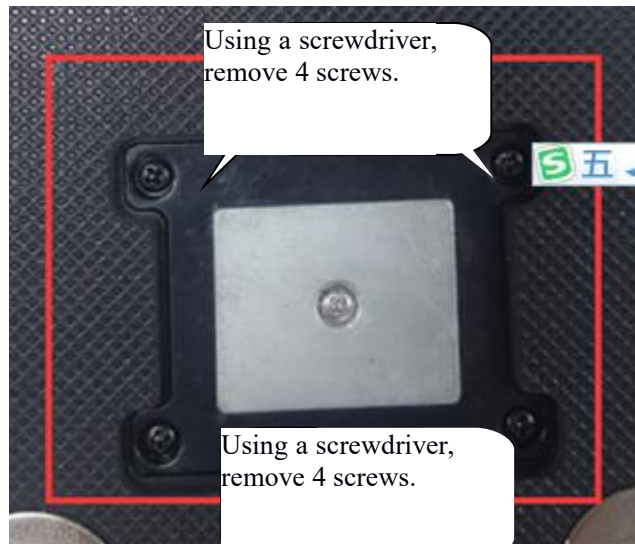
5. Specific use steps:

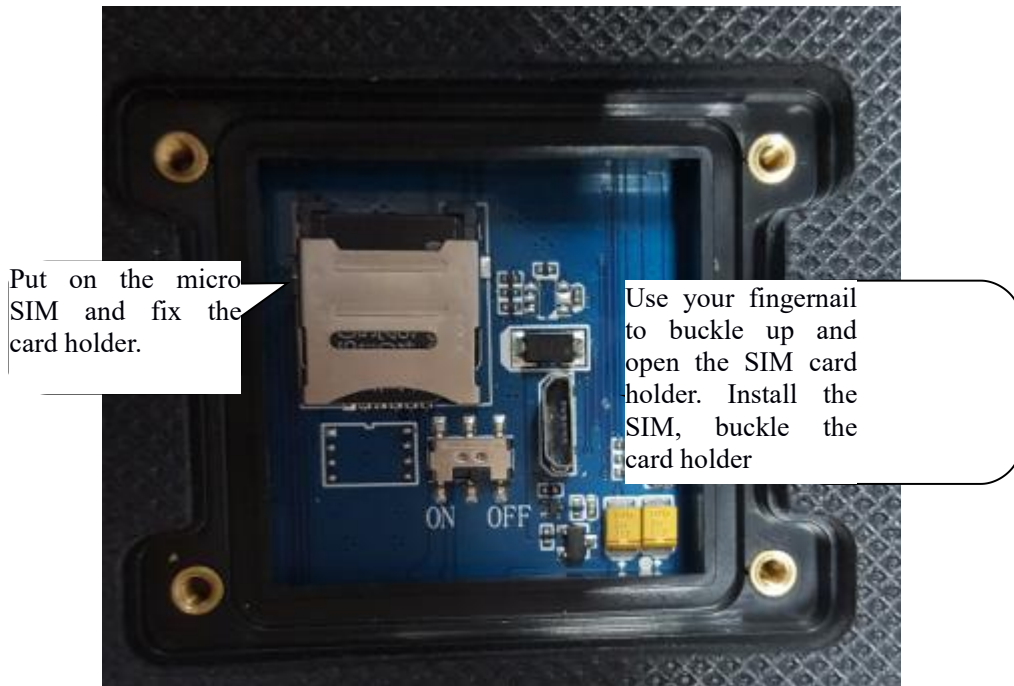
1. Select the SIM card:

- You can use China Mobile or China Unicom' s 2G SIM card, or China Unicom' s 3G card

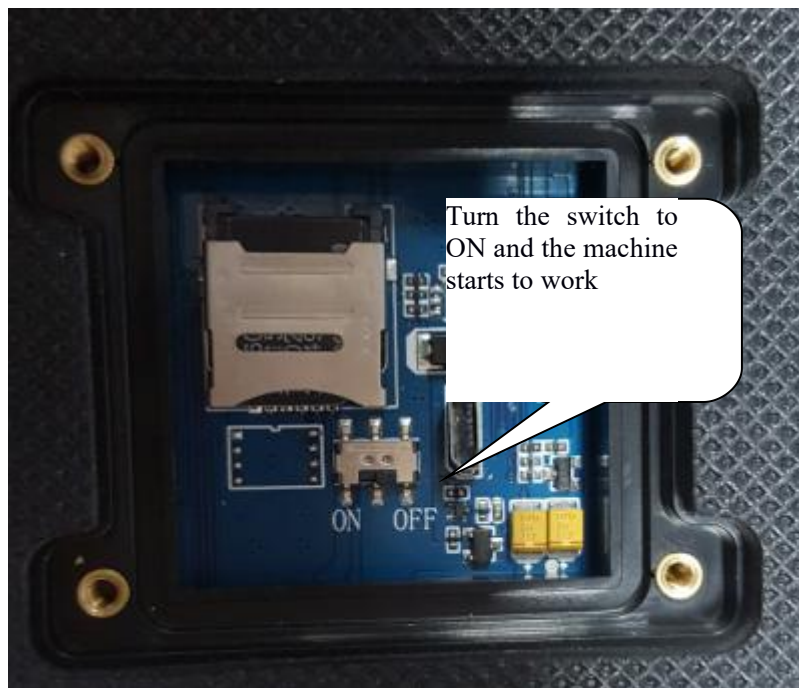
- Support SMS/GPRS function and have enough balance.

2. Remove the 4 screws on the back cover, open the back cover of the device, insert the SIM card into the dedicated SIM card slot and lock it.





2. Turn the switch to the ON position to turn on the smart lock.

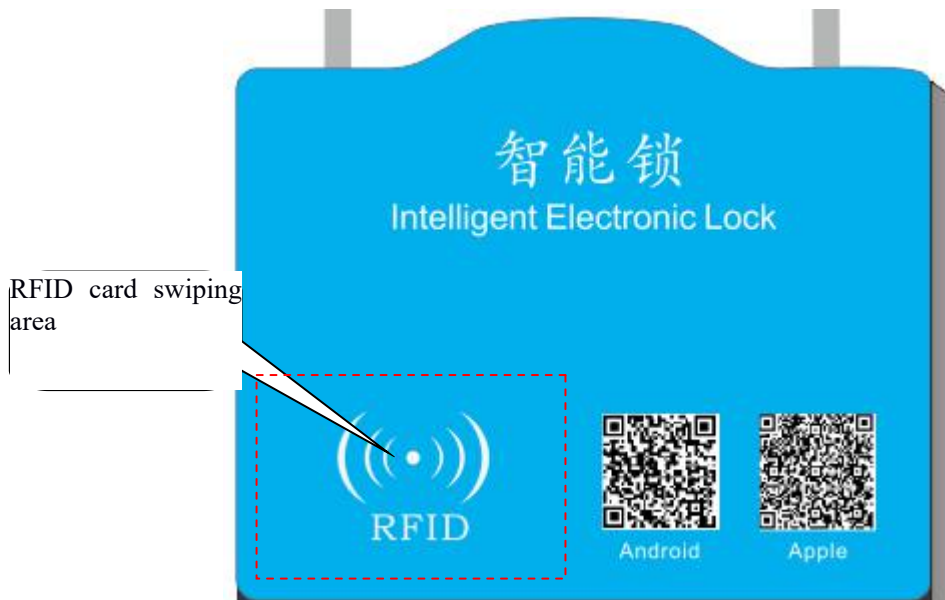


3. Install the SIM and turn on the battery switch, close the bottom cover, and attach the screw



4. unlock

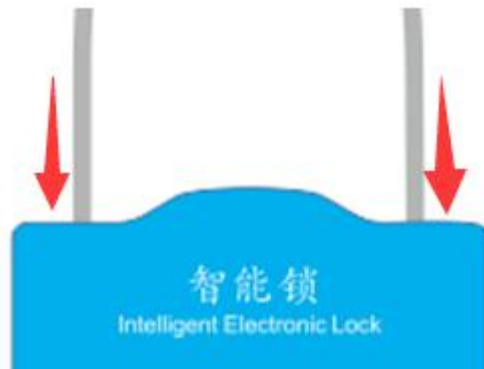
Put the RFID card on the RFID label of the housing, the lock will rotate at this time, when the lock is successfully unlocked, the buzzer will give a reminder



note:

- 1、 When the buzzer prompts to unlock the lock, the user needs to pull the lock wire within 35 seconds, otherwise the host detects that the lock wire has not been pulled out and will relock.
- 2、 Since this product is an electronic product, please do not pull the lock wire, which may cause abnormal unlocking. After swiping the card, the buzzer also prompts that the card is successfully swiped but the lock cannot be opened. Please

press down the lock wire first, release it, and then swipe the RFID.



5. Close the lock

Insert the lock wire into the lock hole. When the lock detects that the lock wire is normally installed, the lock will be automatically locked. When the lock is locked, the buzzer will sound a reminder. When the motor is locked, the lock wire changes, the buzzer will beep for a long time to remind the user that the lock failed, please try again.

six. Set machine parameters:

After you read the above brief introduction to the product, the product has been installed and the SIM card has been installed. Let's start the specific operation and use.

Note: All SMS commands should be entered in English mode, and there will be no response if the command is incorrect or the format is incorrect.

1. Device IP address and port

Send SMS to the number of the device, the command format:

`AS1234*F10#1,113.106.93.50,7001,0#`

Reply to terminal parameters

`IP: 113.106.93.50, 7001,0, cmnet, gprs, gprs, ID: 31684086, M: 6,
GPS: A, 9, CSQ: 19, CGR: 5, ACC: 1, BAT: 65%, VER: AT10 -V1.0`

E. g:

IP address is113.106.93.50port7001, UDP
instruction"`AS1234*F10#1,113.106.93.50,7001,0#`"

The command starts with *AS*, "1234" is the password, the initial default is 1234, "*F10#1" means this command is the IP command to set the machine, 113.106.93.50 means the server connected to the machine, 7001 is the port, 0 means The machine uses UDP to connect to the platform. If you want to use TCP, change 0 to 1.

2. Query terminal status

Send SMS to the device' s number, command format

`AS1234STATE#`

Reply to terminal parameters

IP: 113.106.93.50, 7001,0, cmnet, gprs, gprs, ID: 31684086, M: 6,
GPS: A, 9, CSQ: 19, CGR: 5, ACC: 1, BAT: 65%, VER: AT10 -V1.0

IP: 113.106.93.50 represents the server address reported by the current machine,

Port: 7001 means the port of the current machine, 0 means UDP report, if it is 1 means TCP upload

Cmnet, gprs, gprs: indicates the APN of the current machine

ID: 31684086 represents the ID number of the current machine

GPS: A, 9 means the current positioning state of the machine V means no positioning, A means positioning, 9 means there are 9 stars

CSQ: 19, mobile information of the current machine

CGR: 5 indicates the status of the card,

ACC: 1 means the state of the lock, 1 is the lock, 0 is the lock

BAT: 65% of the current lock power

VER: AT10-V1.0 indicates the version burned by the current machine

M: 6 means current machine status, 6 means online, 0 means initialization, 1 means query CSQ, 2 means register network, 3 means query CGREG status, 4 means register APN, 5 means connecting to server, 7 means disconnecting from network, 8 Means call, 9 means upgrade

3. SMS unlock

Send the SMS command "AS1234*F10#8,123456,#" to the number of the device, and the terminal's reply content is "Open lock OK", the terminal responds with this content, indicating that the lock is disconnected successfully

Note that the default password for unlocking is not 123456, please pay attention. The password can be unlocked remotely. For security, please consult the supplier for the unlock password.

4. Set the frequency of unlocking and reporting

Send SMS command "AS1234*F10#G,300,600,#" to the number of the device, the terminal responds with "accOn:300 accOff:600 rd:0 sp:0,0s stp:0 dr:0,0 idl:0 mv:0 time:+8 cq:0,0 geo :0 step:377 ack:0 msg:2568,56 sleep:0,0

", The terminal has this content to indicate that the recovery is successful

ACCon: Indicates the reporting interval of lock

ACCOff means the reporting interval of unlocking

Sleep means sleep time

5. Restore Factory

Send SMS command "ASAX*%UPAS" To the number of the device, the terminal responds with "password:1234,OK", the terminal responds with this content, indicating successful recovery

6. Restart terminal

Send SMS command "AS1234RSGS#" To the number of the device, the terminal responds with "GSM/Restart;OK", the terminal responds with this content, indicating successful restart

note:

- All SMS commands should be edited in English mode. Inputting in Chinese mode will result in direct deletion without replying to the SMS.
- All text messages start with AS and end with #. If the format is wrong, the program will not recognize it.
- 1234 is the factory default password of the machine. If the password is wrong, the program will not reply to the SMS

Seven, positioning monitoring

A. Log in to monitor via mobile phone

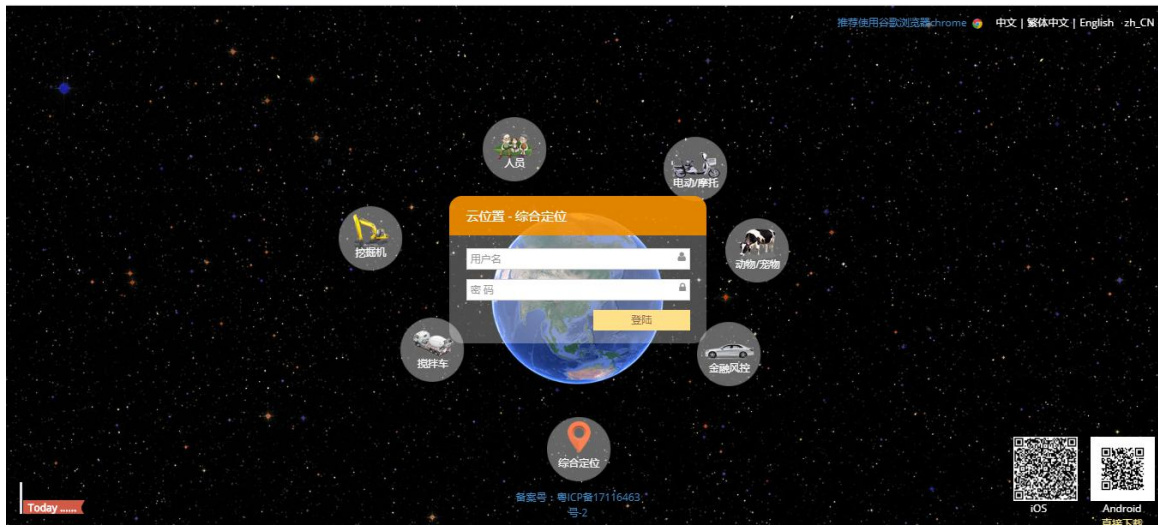
Android phone: Please open your browser and scan the following QR code to download:



iPhone: Please scan the following QR code to download:



B. To monitor through a computer, the computer must be able to access the intel network normally. Open the browser chrome and enter: <http://www.gps218.com> in the address bar, as shown in the figure below:



Select the language on the upper right of the login interface, the default is English