DS869（non-embedded mounting）Electronic Lock Specification

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Contents

1．Product Introduction

DS869 is an intelligent anti-pry idle lock independently developed and produced by our company. It adopts an integrated design, and the lock shell is made of aluminum alloy. The state of the handle is improved on the original basis. The handle idling when not operated, effectively preventing prying. It is a smart cabinet lock specially developed by our company for the renovation market. This lock adopts a floating design, which can solve the problem of the mismatch between the original opening size of the cabinet door and the new lock opening size, thereby greatly reducing the need to change the cabinet door opening. The labor and time costs caused by the hole size. This lock case is made of aluminum alloy, has an IP65 waterproof rating, and can be used both indoors and outdoors.

Product functions include RS485 remote communication, Bluetooth, code scanning, card swiping and other unlocking methods. Bluetooth code scanning background monitoring and management, etc., through smartphone APP or remote control device, the door lock status can be monitored anytime and anywhere to achieve intelligent management. It adopts advanced encryption technology to ensure the security of door lock data. It integrates multiple functions to realize remote control, Bluetooth code scanning and background monitoring and management.

The functional design adopts one-click restart and emergency charging interface to cope with various complex environmental emergencies on site. Unlocking in emergency situations can be divided into two methods: mechanical and electronic according to needs. You can choose between the two. The main difference between the two is the equipment management and data recording of unlocking personnel. This electronic lock is widely used in outdoor cabinets in the renovation market, tower base stations and other places.

2．Technical parameters

<table>
<tr><td rowspan="13">Overall specifications</td><td>Item</td><td colspan="2">Specification/Condition</td></tr>
<tr><td>Model</td><td colspan="2">DS869（non-embedded mounting）</td></tr>
<tr><td>Overall dimensions</td><td colspan="2">See drawing</td></tr>
<tr><td>Rated Voltage</td><td colspan="2">DC 12V</td></tr>
<tr><td>Operating Voltage</td><td colspan="2">DC 12V±20%</td></tr>
<tr><td>Maximum power</td><td colspan="2">≤7.2W</td></tr>
<tr><td>Standby power</td><td colspan="2">≤0.5W</td></tr>
<tr><td>Rated Current</td><td colspan="2">≤0.6A</td></tr>
<tr><td>Protection degree</td><td colspan="2">IP65</td></tr>
<tr><td>Weight</td><td colspan="2">1KG</td></tr>
<tr><td>Dimension</td><td colspan="2">220*45*42.5mm</td></tr>
<tr><td>Unlock method</td><td colspan="2">RS485+Bluetooth+DO&DI+ Electronic key/mechanical key (optional)</td></tr>
<tr><td>Anti-prying level</td><td colspan="2">RC 4</td></tr>
<tr><td>Fire-proof level</td><td colspan="2">UL94-V0</td></tr>
<tr><td>Lock cylinder type</td><td colspan="2">Single pass configuration (001-200) Note: Domestic non-standard</td></tr>
<tr><td>Name</td><td>Material</td><td>Surface treatment</td></tr>
</table>

Part specifications	Housing	Aluminum Alloy	Black
	Handle	Zinc Alloy	Black
	Steel bolt	Stainless steel 304	True color
	Press plate	Zinc Alloy	Blue white zinc

Hardware specifications	Name	Specification
	Hardware platform	32-bit ARM Cortex™-M4F
	Bluetooth chip	Support BLE4.2

Environmental conditions	Item	Condition
	working environment	Temperature: -30~70℃ Humidity: 10-90%
	Storage environment	Temperature: -40~80℃ Humidity:0~90%
	Altitude	-60m-4000m
	Packaging vibration resistance test	After packaging, there is no abnormality after applying 1.1 acceleration + vibration in three directions for 30 minutes.
	Packaging impact resistance test	After being packed, it is 60 cm high, has 1 corner, 3 sides and 46 faces. It fell naturally without serious damage.

3．Operating instructions

3.1 RS485 remote unlocking

After the lock is powered on, the host computer connects the locks 485A and 485B, and sends the lock to the developer via RS485 lock command, trigger the lock to unlock, the green light turns on and the buzzer prompts, then press the handle to open the lock, for detailed RS485 protocol, see "RS485 Communication Protocol".

3.2 Electronic key/mechanical key unlocking

3.2.1 Use a mechanical key to open the mechanical lock cylinder in an emergency and rotate the handle to unlock action;

3.2.2 Using an electronic key to unlock the door requires the operator to have permission to unlock the door. The electronic key is connected to the mobile phone.After the mini program is Bluetooth, click to unlock, align the key with the electronic lock cylinder and hear the beep, then rotate the lock. The core performs the unlocking action.

3.3 Bluetooth unlocking/Scan code unlocking

3.3.1 Log in to PC for authorization

You need to enter http://152.136.192.99:8100/#/login on the PC to log in.Administrator account, authorize the lock to the user account.

3.3.2 Log in to the applet

Search the "Jinfu IoT" applet in the WeChat applet on your mobile phone and log in with an authorized account.
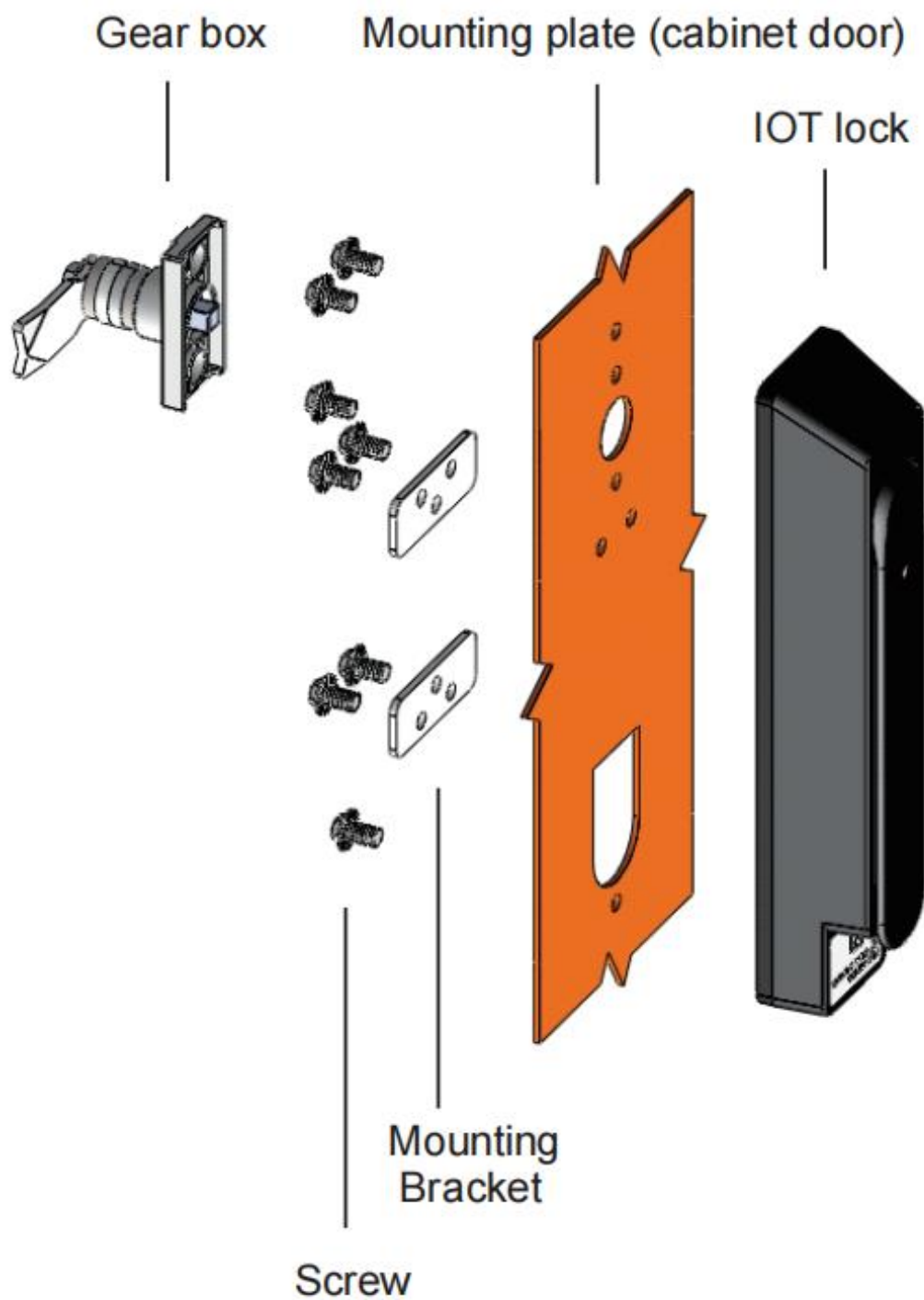
3.3.3 Bluetooth/scan code unlocking operation

After logging in to your account, click on the Bluetooth logo on the main page, find the Bluetooth number of the corresponding lock, and click to unlock; or click to scan the logo and scan the QR code on the lock, and the phone can automatically connect to the Bluetooth of the electronic lock to perform the unlocking operation.
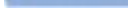
3.4 DO&DI unlock

After the lock is powered on, touch the brown wire and orange wire, the lock will light up green and the buzzer will sound. Press the handle to open the lock.

4．Dimension diagram

5 ．Installation diagram

Gear box Mounting plate (cabinet door)

IOT lock

Mounting Bracket

Screw

6．Wiring diagram

No.	Color		Signal
1	Orange		DO&DI -
2	Brown		DO&DI +
3	Grey		485B
4	Purple		485A
5	Blue		Lock tongue status +
6	Green		Lock tongue status -
7	White		
8	Yellow		
9	Black		GND
10	Red		+12V

Matters need attention:

1. Connect the red wire (+12V) to the positive terminal of the DC power supply and the black wire (GND) to the negative terminal of the DC power supply.

2. The output signals of the door magnetic status of the yellow and white wires are passive models. If the door magnetic status of the yellow and white wires is connected, the door indicates closed. If the door magnetic status of the yellow and white wires is disconnected, the door indicates open. Those not marked do not have door magnetic function.

3. The blue line and the green line are the output signals of the lock tongue status. The signals are passive models. When the blue line and the green line are disconnected, it indicates that the lock tongue is open. The blue line and the green line are conducting: It indicates that the lock tongue is closed.

4. The purple line and the gray line are 485 functions. The purple line is 485A, the grayish-green line is 485B, the baud rate is 9600, the data bit is 8 bits, the stop bit is 1 bit, and there is no check.

5. The brown wire and the orange wire are switch input signals, which are passive signals. When the brown wire and the orange wire are connected and touched once, the lock can be opened.

7．Packing List

No.	Attachment Description	Unit	Quantity	Notes
1	Electronic lock	piece	1	
2	Connection line	piece	1	/
3	Press plate	piece	2	
4	M5*12 hexagonal locking screw	piece	6	
5	Single point locking structure	set	1	 Can be selected according to customer needs

8．Matters need attention

1、Please do not use it beyond the limited parameter in this specification, otherwise we will not offer any warranty.

2、In case of any changes of the specification specified on this document.A written notice is requested in advance.

3、Please do not wrap the power cord around the lock or pull the power cord hard, otherwise the power cord may be damaged and cause function failure.

4、If any information and documents are different from this document, this document will be taken as the main reference.

5、Please do not use in hazardous environment or any environment with flammable gas .

6 、Please be cautious when handling or installing, it may cause damage if electronic lock fell to the ground.

7、The torque of the screw is not allowed to exceed 3N.m,and the torque of the handle is not allowed to exceed 30N.m.

8 、During the installation, any strike to the lock body is not allowed to avoid damage to the components.Installer should wear gloves.

9、The door must be kept stable during installation, and the cutout of cabinet door must match the lock.

10、Do not strike the lock body by force to prevent the lock from corrosion,please do not use chemical substances to wipe the surface of the lock body.

11 、After installation, the lock body should kept flat and vertical. The lock can reach the waterproof grade of IP65 without coating any waterproof glue.