DS867 Electronic Lock Specification

Latest compiled: 2024
Latest version: V1.0

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1 . Product Introduction

DS867 is a dedicated smart lock for IDC data computer rooms independently developed and produced by our company. Its shell is made of high-strength PA66 nylon material, which not only has extremely high strength and wear resistance, but also has good toughness and anti-collision properties.

The lock body integrates a variety of unlocking methods, including remote, password, fingerprint, card swipe, Bluetooth, mechanical key/electronic key, etc., which fully meets the unlocking needs of different occasions. DS867 also has management permissions such as identity verification, two-factor authentication, time-based door opening authorization, etc., and can have effectively ensure infrastructure security. It can effectively manage personnel entering and exiting the computer room and improve the security of the data computer room infrastructure. At the same time, it can be seamlessly connected with access control systems, security systems and other equipment to achieve all-round integrated security management.

Network the computer room with the cabinet as the management unit, and use hardware and software to combine each other to monitor each cabinet unit in the computer room in real time, allowing operation and maintenance personnel to authorize opening cabinets, automatically saving records, automatically recording work orders, and alarming events. remind. Through intelligent information management to support IDC business development, improve IDC operation and maintenance efficiency, and ensure IDC service quality.

2 . Technical parameters

	Item	Specification/Condition	
Overall specifications	Model	DS867	
	Overall dimensions	See drawing	
	Rated Voltage	DC 12V	
	Operating Voltage	DC 12V±10%	
	Power Consumption	≤3.6W	
	Rated Current	≤160mA	
	Peak current	≤250mA	
	Weight	0.6KG	
	Dimension	38*240*45mm	
	Minimum panel cutout	124*24.5mm	
	Unlock method	RS485+IC Card+Bluetooth+ Fingerprint+Password+electronic key/mechanical key (optional)	
Part specifications	**Name**	**Material**	**Surface treatment**
	Housing	Nylon PA66	Matte Black
	Handle	Zinc Alloy	Matte Black
	Lock cylinder	Mechanical lock cylinder (single open/One key unlocks all locks) /electronic lock cylinder optional	

	Press Plate	Carbon steel	Blue and white plated
Hardware specifications	**Name**	**Specification**	
	Hardware platform	ARM 32bit Cortex-M0+	
	Bluetooth chip	Support BLE4.2	
	Number of supported users	300 groups	
	Card parameters	Frequency: 13.56MHZ	
		Supported card types: IC, NFC	
	Fingerprint	Search time ≤1s	
	Password	6 digits (supports virtual digit password function)	
Environmental conditions	**Item**	**Condition**	
	working environment	Temperature: -30~60℃ Humidity: 5-93%	
	Storage environment	Temperature: -40~80℃ Humidity:≤93%（40℃±2℃）	
	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 Power on the electronic lock

After the electronic lock is powered on, the buzzer sounds three times, the fingerprint light and LED green light flash, the display lights up and displays normally, and the electronic lock starts normally.

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 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".

3.4 Bluetooth unlocking/scan code unlocking

3.4.1 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.

3.4.2 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.

3.4.3 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.

3.5 Add users

Press and hold the # sign. After 5 seconds, the lock will prompt you to enter the management interface. You need to enter the administrator password and the administrator's initial password (please consult technology).

After entering, enter the setting page and press 1 to select user settings. This function is used to set users.

And enter the card number, fingerprint, add password and other functions under this user; that is to say, when adding the card number, fingerprint or password, you need to add the user first (the smart lock will automatically assign the user number), and then you can Enter/modify the corresponding card number, fingerprint and password.

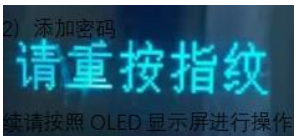
After selecting 1, enter the user settings and the smart lock will automatically assign a user number

After the user assignment is completed, the page will be automatically switched to add card number, fingerprint and password permissions.

3.6 Fingerprint unlock

3.6.1 Enter fingerprint

Press numeric keypad 1 and select Add fingerprint,



Please follow the OLED display for subsequent operations, where the fingerprint needs to be successfully entered 4 times before the successful fingerprint entry is displayed.

3.6.2Fingerprint unlock

The authorized user presses the fingerprint recognition area. At this time, the lock status indicator light lights up and a buzzer sounds short, and the OLED display shows that the lock has been unlocked. At this time, lift the handle and think, the green light lights up, and rotate the handle to proceed. unlock.

3.7 Password unlock

3.7.1Add password

Press number pad 2 and select Add Password,

Please follow the OLED display for subsequent operations. The password needs to be confirmed. Enter the # sign after each password input to confirm.

3.7.2Password unlock

Enter the authorized password. At this time, the lock status indicator light will light up and the buzzer will sound a short sound. The OLED display will show that the lock has been unlocked. At this time, lift the handle, the green light will light up, and rotate the handle to unlock.

3.8Swipe card to unlock

3.8.1 Enter card

Open the lock test tool (can change the lock number, swipe the card to write and read, check the card number, read the lock status, check the version, etc.) Open the IC card management, place the unauthorized card in the lock swipe area to read the card number, click Read Get the card number. After the reading is completed, click to write the card number. At this time, the card can be queried among the authorized card numbers of the lock.

3.8.2 Swipe card to unlock

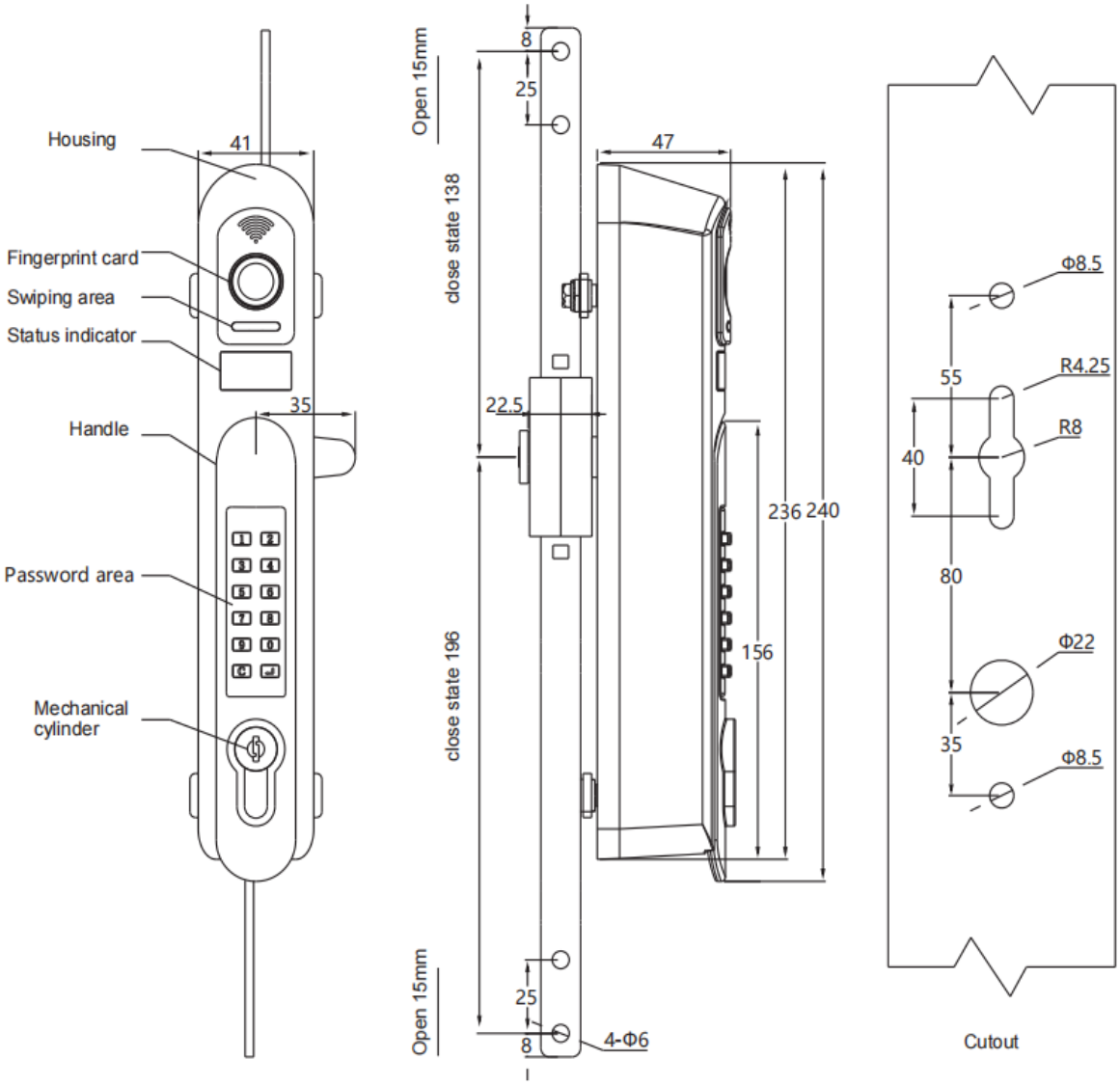
Place the authorized card in the card swiping area of the lock and swipe it. When the lock status indicator light turns solid green, lift the end of the handle and rotate the handle to unlock.

Matters need attention:

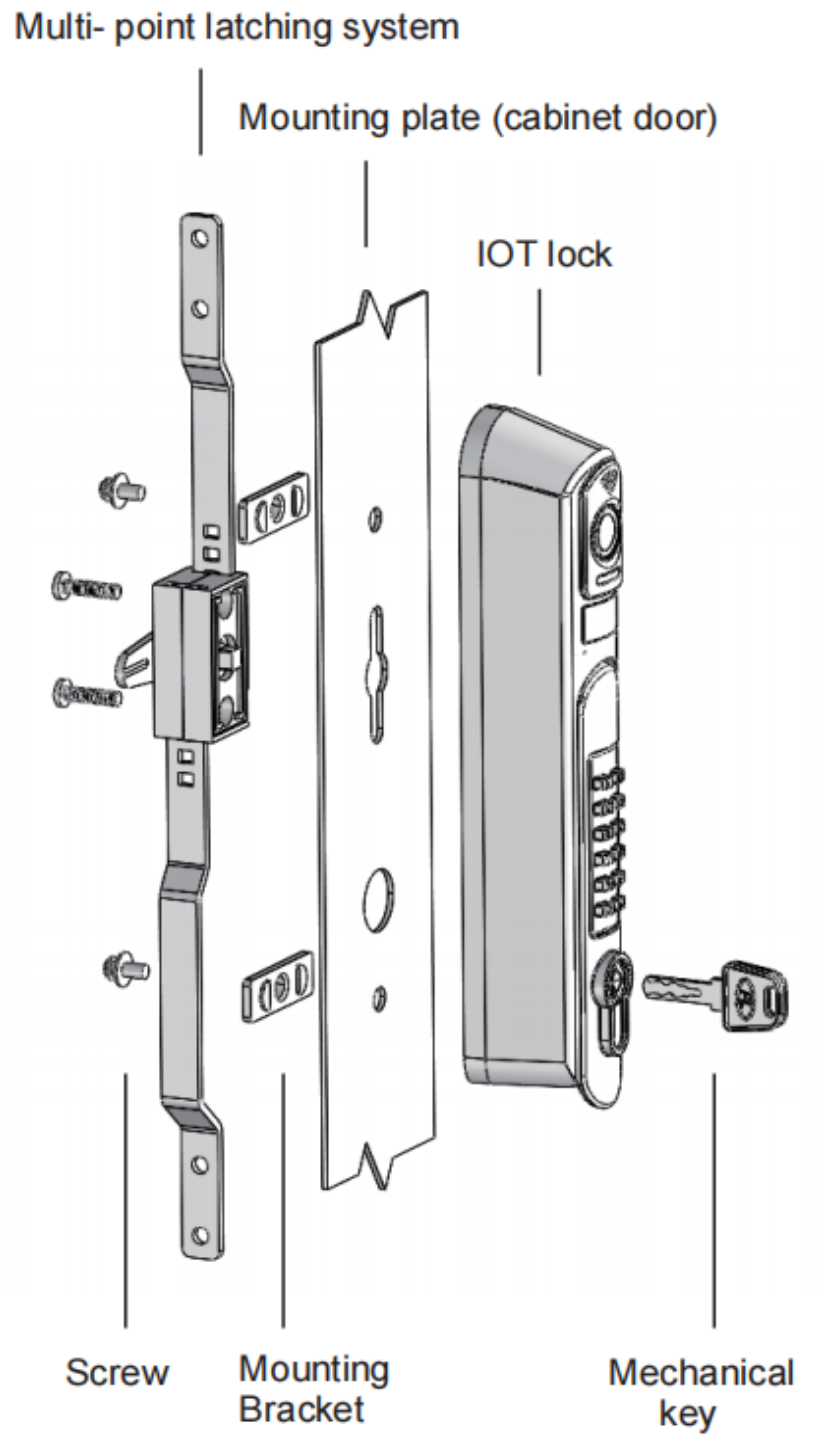
1. After the lock receives the instruction, when you see the indicator light on and hear the buzzer sound, you can lift the handle to unlock. If you do not lift the handle, the red light will remain on and wait for 10 seconds before the electronic lock automatically locks. .

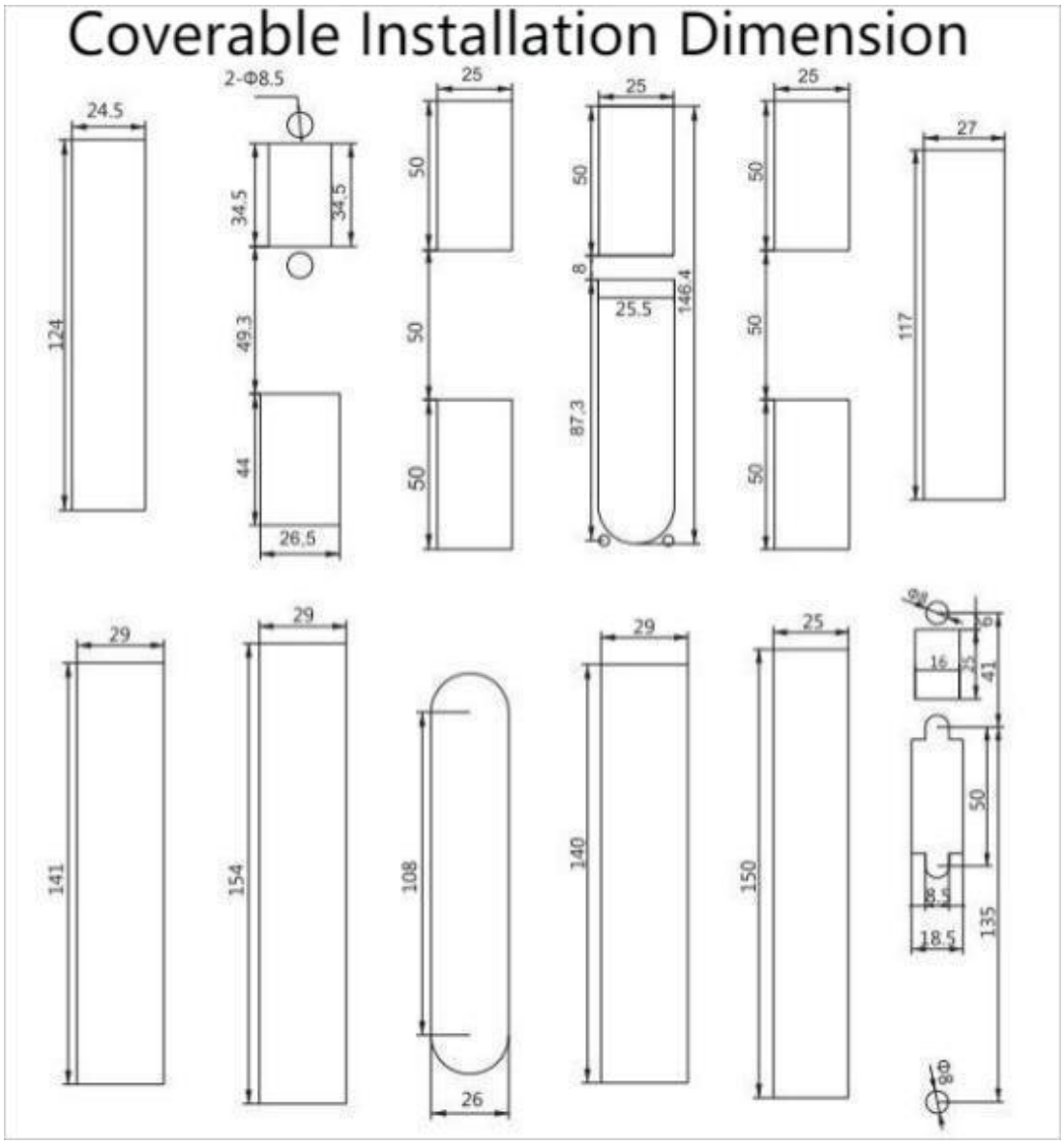
2. If the handle is pressed within 10 seconds after the electronic lock is unlocked, the electronic lock will automatically complete the locking function.

4 . Dimension diagram

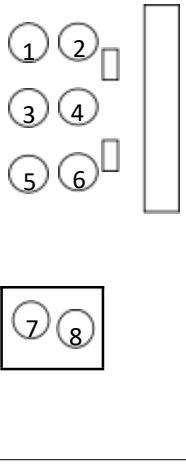


5 . Installation diagram




Coverable Installation Dimension
24.5
124
2-Φ8.5
34.5
34.5
49.3
44
26.5
25
50
50
50
25
50
8
25.5
146.4
87.3
25
50
50
50
27
117
29
141
29
154
108
26
29
140
25
150
16
25
41
50
18.5
135

6 . Wiring diagram

NO.	Color	Signal definition	
1	Blue / White blue	+12V	
2	Brown White brown	GND	
3	Green	485A	
4	White green	485B	
5	Orange	Handle status output	
6	White orange	Handle status output	
7	Red	Door sensor input	
8	Black	Door sensor input	

Matters need attention:

1. Connect the blue/white blue (+12V) to the positive pole of the DC power supply, and connect the brown/white brown (GND) to the negative pole of the DC power supply;

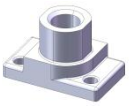
2. The green line is 485A, the white green line is 485B, the baud rate is 9600, the data bits are 8, the stop bit is 1, and there is no checksum

3. The orange and white orange lines are the output signals of the controller status, which are passive models. If the orange and white orange lines are disconnected, it means that the controller is turned off; The orange and white orange lines are conductive, indicating that the handle is open;

4. The red and black lines represent the door magnetic status input signal/switch input signal, which is a passive signal; Door magnetic function: When the red and black lines are connected, the door indicates that it is closed; when the red and black lines are disconnected, the door indicates that it is open;

5. If the switch function is required, it needs to be confirmed with the sales personnel in advance. If there is no communication confirmation, the door magnetic function will be defaulted

7 . Packing List

No.	Attachment Description	Unit	Quantity	Notes
1	Electronic lock	piece	1	
2	Connection line	piece	1	2.2m
3	Slide nut	piece	4	 Thread 4/5 optional
4	Press plate	piece	2	
5	key	set	1	
6	Round head screws with flat pads 5*12 5*12	piece	2	
7	Round head screws 5*20 5*20	piece	2	 Choose the length according to customer needs
8	Rod box control	set	1	 or 

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 must remain flat and vertical. Since this p roduct has a password pad, water can easily enter the lock and damage the lo ck, so this product is only suitable for indoor use.