DS905 Anti-Prying Lock Specification

CHINA TOWER
中国铁塔

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Contents

1 ． Product Introduction

DS905 is an intelligent cabinet anti-pry lock developed and produced by our company. It adopts an integrated design, the lock shell is made of aluminum alloy, and has perfect anti-pry function. The lock body integrates RS485 communication, Bluetooth, code scanning, switch and other functions, which can realize remote control, Bluetooth code scanning background monitoring and management, etc. Through the smart phone APP or remote control device, the door lock status can be monitored anytime and anywhere to achieve Intelligent manage. 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 two are mainly different from the equipment management and data recording of unlocking personnel.

This electronic lock is widely used in communication equipment rooms, outdoor cabinets, tower base stations and other places. It is simple to install and easy to maintain.

2 . Technical parameters

	Item	Specification/Condition	
Overall specifications	Model	DS905	
	Overall dimensions	See drawing	
	Panel cutout	See drawing	
	Rated Voltage	DC 12V	
	Operating Voltage	DC 12V±20%	
	Maximum power	≤7.2W	
	Standby power	≤0.5W	
	Rated Current	≤0.6A	
	Protection degree	IP65	
	Weight	1.2Kg	
	Unlock method	RS485+Bluetooth+DO&DI+ electronic key/mechanical key (optional)	
	Anti-prying level	RC 4	
	Fire-proof level	UL94-V0	
	Mechanical lock cylinder type	Single pass configuration (001-200) Note: Domestic non-standard	
Part specifications	**Name**	**Material**	**Surface treatment**
	Housing	Aluminum alloy	milky white

	Short side cover	Aluminum alloy	milky white
Hardware specifications	**Name**	**Specification**	
	Hardware platform	32 bitARM 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 was no abnormality after applying 1.1G acceleration + vibration in XYZ 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 Bluetooth unlocking/scan code unlocking

3.2.1 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.

3.2.2 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.

3.2.3 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.

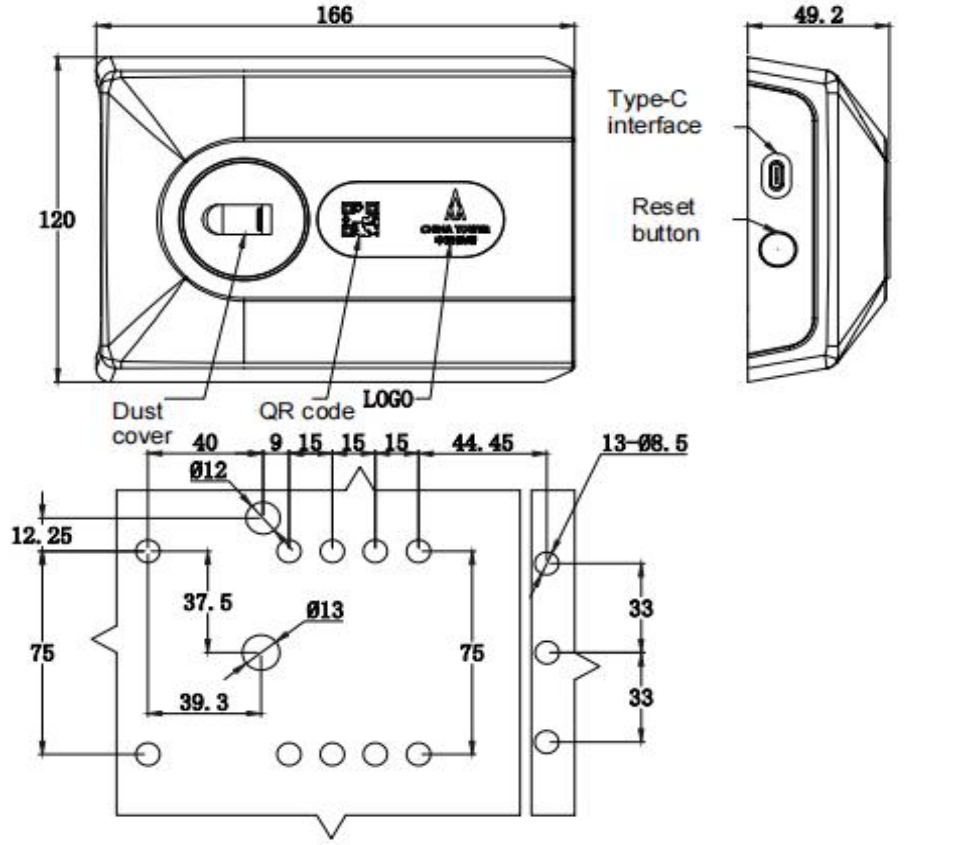
3.3 Electronic key/mechanical key unlocking
3.3.1 Use a mechanical key to open the mechanical lock cylinder in an emergency and rotate the handle to unlock action;

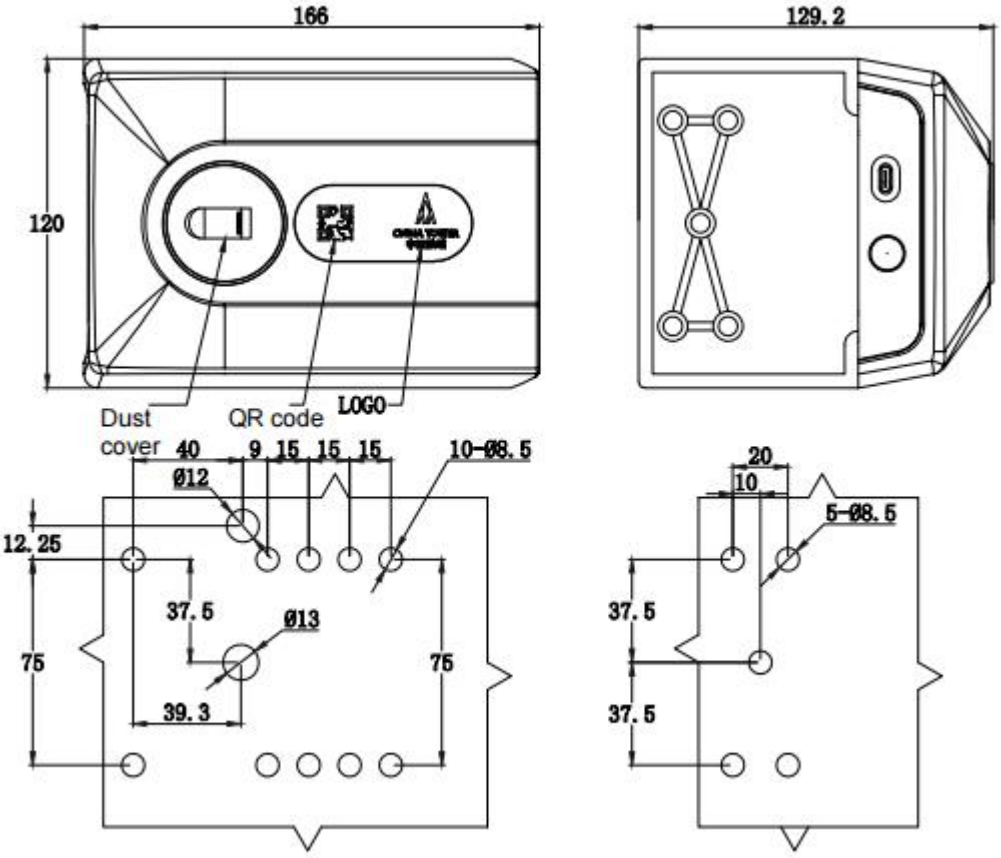
3.3.2 Using an electronic key to unlock the door requires the operator to have permission to unlock the door. The electronic key is connected to the mobile phone.After the mini program is Bluetooth, click to unlock, align the key with the electronic lock cylinder and hear the beep, then rotate the lock.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

3.4 DO&DI unlock
After the lock is powered on, touch the green wire and black wire, the lock will light up green and the buzzer will sound. Press the handle to open the lock.

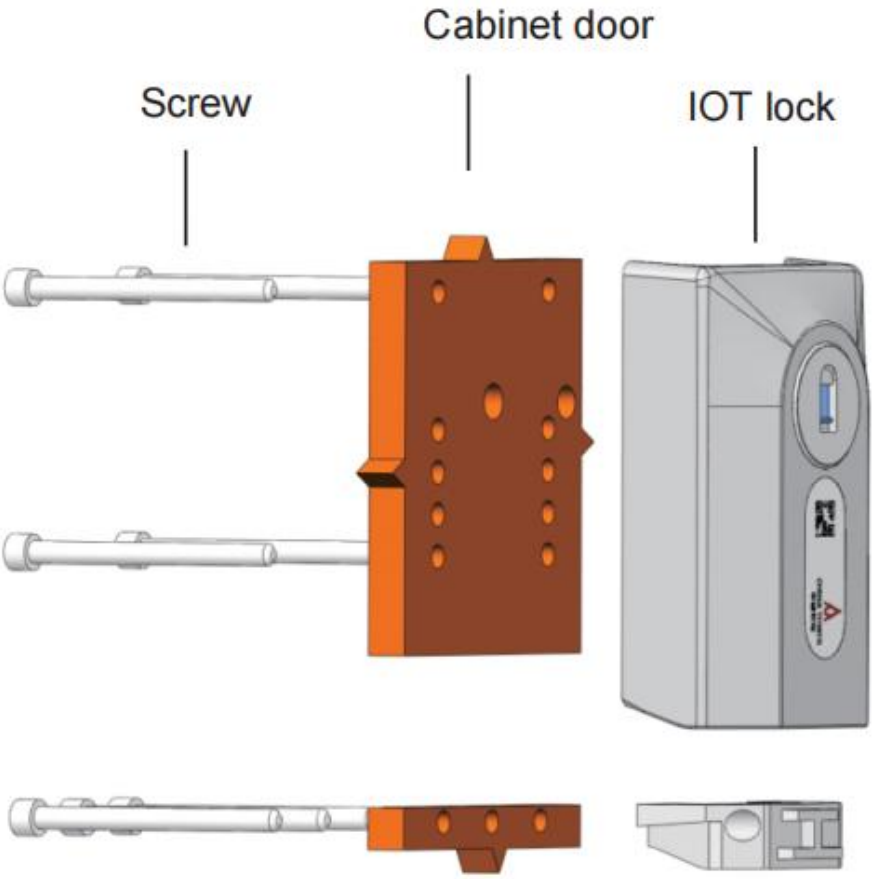
3.5 4G unlocking
After the lock is powered on, log in to the corresponding background of the lock configuration, and send the lock unlocking command to the lock through 4G to trigger the lock to unlock. When the green light is on and the buzzer prompts, press the handle to open the lock. For detailed 4G protocols, please refer to the "4G Communication Protocol".

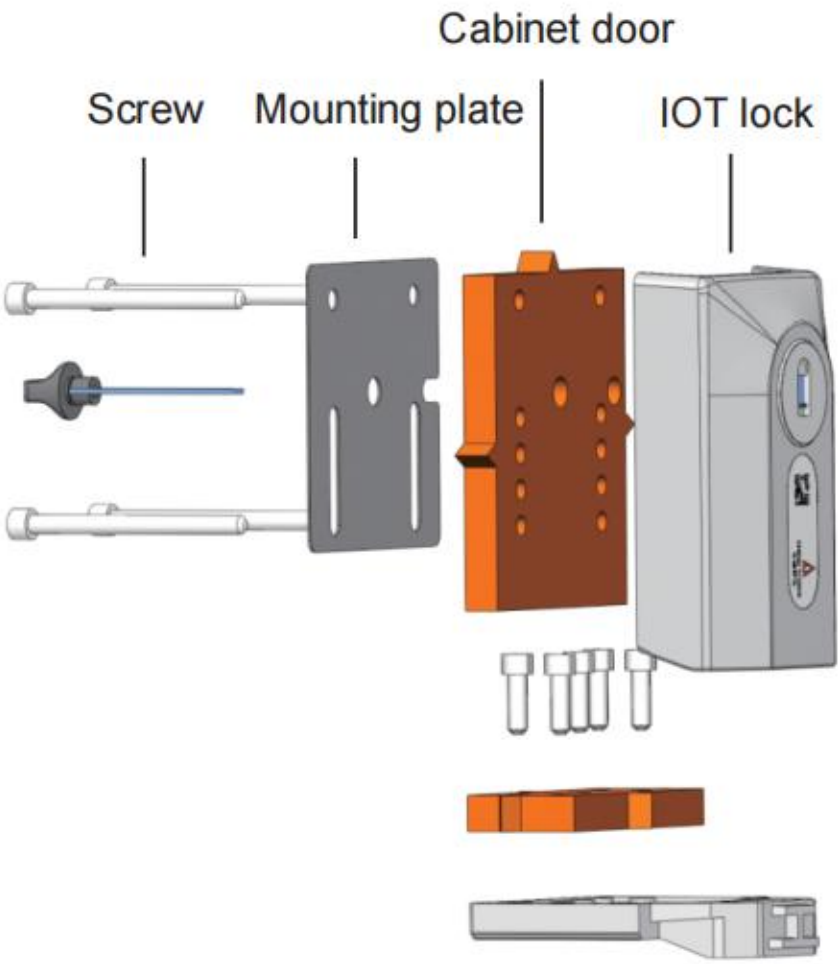
4 . Dimension diagram





5 . Installation diagram





6 . Wiring diagram

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

Notes:

1. When the lock tongue is open, pin 5 and pin 6 are disconnected; when the lock tongue is closed, pin 5 and pin 6 are connected;

2. When the door sensor is open, pin 3 and pin 4 are disconnected; when the door sensor is closed, pin 3 and pin 4 are connected;

3. Short-circuit pin 9 and pin 10 for 1 second, and the lock will open.

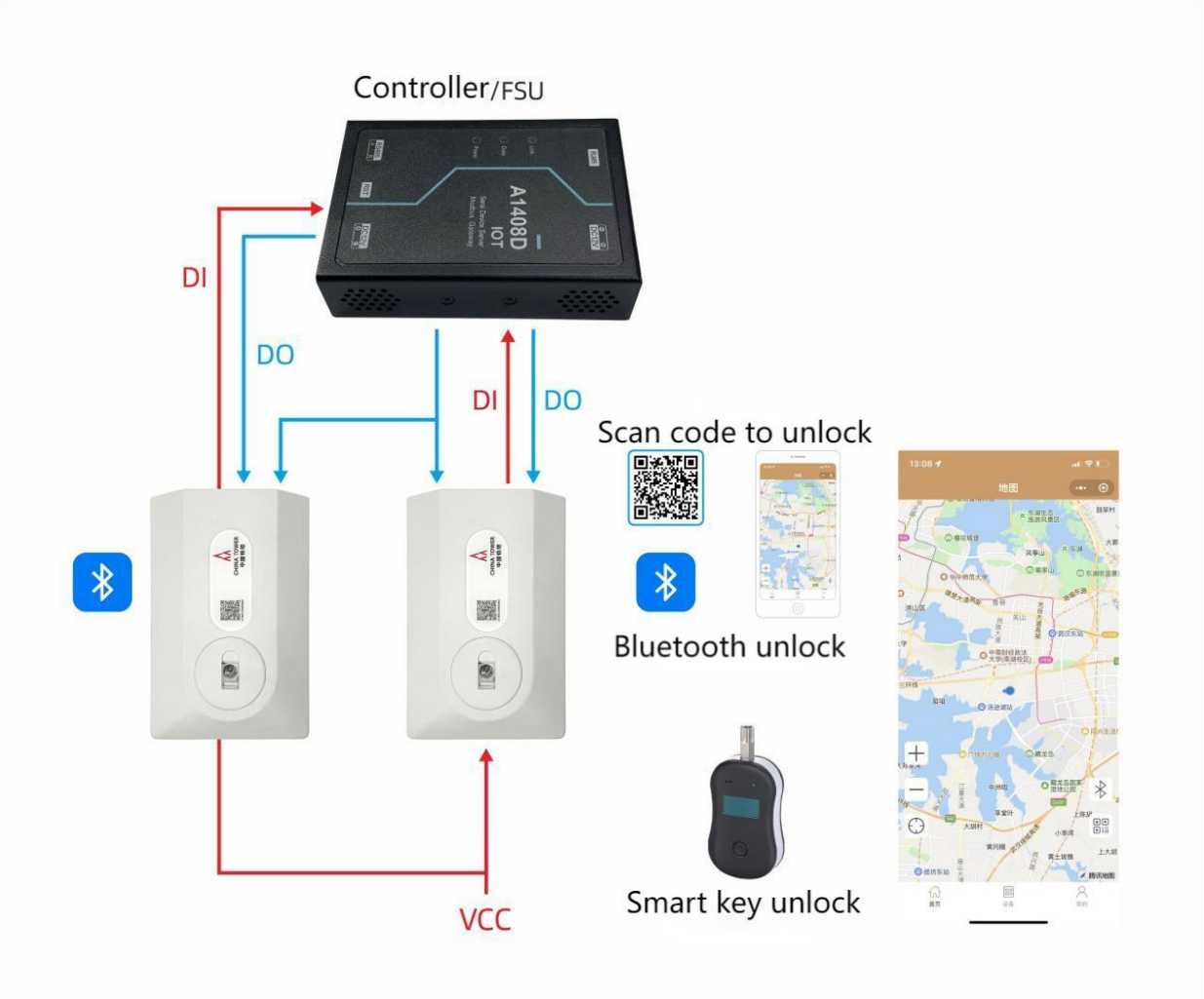
4. There is no need to connect the jumper to the 12V of pin 1 or the GND of pin 2 on the switching lines of pin 9 and pin 10. If there is a jumper connected to the DO port of the FSU end, you need to remove the original jumper first. line before installing our lock, otherwise it will cause malfunction.

7 . Packing List

Attachment No.	Attachment description	Unit	Qty	Remark
1	Electronic lock	set	1	
2	Connection line	pair	1	/
3	Short side cover	set	1	
4	Side cover mounting plate	set	1	
5	Short side cover guide hole plate	set	1	
6	6*35 hexagon socket screws	set	1	
7	8*100 hexagon socket screws	piece	5	
8	8*120 hexagon socket screws	piece	3	
9	8 nuts	piece	8	/

Typical application 1

Compatible with scanning code unlocking, Bluetooth unlocking, DO&DI unlocking and other unlocking methods, no programming required, simple use DO&DI control method to realize remote unlocking, mobile phone applet to query lock status (system supported), unlock records and other functions.



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.