

MIA-3DSTc7u

Installation Guide



Safety Instructions

- Before connecting the power supply, refer to the installation manual.
- Do not insert any objects into the product's openings. This may damage the internal circuitry and result in fire or electric shock.
- Avoid spilling liquids onto the product.
- During thunderstorms or if the product is not used for an extended period, disconnect the power supply to protect the product from damage caused by power surges.
- Do not overload the power socket or power cables, as this may cause fire or electric shock.
- Do not open the product to avoid the risk of electric shock. For safety reasons, only professional service personnel should open the product.
- Place the product in a secure location, as drops or falls may cause damage.
- Disconnect the product from the power supply before cleaning, and do not use aerosol cleaners.
- The product should be inspected by professional service personnel if any of the following occurs:
 - The power cord or plug is damaged.
 - Liquid has entered the product.
 - The product has been exposed to a humid environment.
 - The product has been dropped or damaged.
 - The product shows visible signs of damage.
 - The product is not functioning properly or cannot be operated according to the manual.
- Before installation, please carefully inspect the entire unit and its components. If any abnormalities are found, contact the sales representative and return the damaged product. All power connectors must be properly connected to the power supply.
- Use only the power supply provided with the product.
- If unusual smells, sounds, or smoke are detected, immediately unplug the power and contact the sales representative. Under no circumstances should you hit or drop the product.
- Make sure all cables are connected correctly and securely.
- The power socket should be installed near the device and should be easily accessible.
- 【低功率射頻器材設備警語 (LP0002 3.8.2)_2020.07.01】

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15.21

Caution!

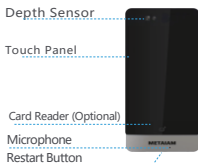
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

1. Product Appearance



2. Product Specification

Hardware	
Core Processor	Quad-core 64 bit ARMv8 with dual-core 32 bit low power consumption DSP and 3D accelerator RAM 2G ; eMMC 16GB
Screen	7" IPS Color LCD Display (800x1280) with Capacitive Touchscreen
Image Input	Depth sensor module in VGA resolution
Network Interface	Ethernet 10/100Mbps Wi-Fi IEEE 802.11 b/g/n 2.4G LTE 4G/ 5G (Optional)
Hardware I/O	RJ45*1, Wiegand*1, USB 2.0*1, Access control (relay, 12V pulse), GPIO*3(door magnetic, button of door-sensor, fire alarm), RS485*1(OSDP)
Miscellaneous	Reset button, anti-tamper button
Audio Output	Built-in speaker, 2W
Audio Input	Built-in Microphone
Power Supply	DC 12V/3A, POE
Operating Environment	Operating temperature : -35°C ~ 55°C Relative humidity < 90%
Protection& Safety	Ingress Protection: IP66 ESD Protection: ±4KV/ ±8KV Impact Protection: IK05 Surge Protection: 2000V
Dimensions	243*122*26mm
Chassis	Aluminum alloy

Authentication Types	
Standard	METAI, PIN, Visitor One-Time-PIN
Optional	Card Reader, Finger Print, QR Code, Intercom

METAID	
Mode	Offline at Device, On-line at Server
Environment	Operates under 0~20,000 Lux, including darkness, strong light, backlight, and high-contrast outdoor backlight conditions
Distance	Best Effective: 0.4~1 meter, max. 2 meters
Performance	Matching Speed ≤ 0.3sec Accuracy up to 99.5% 24~30 times/minute
Credential (1:N)	Default: METAID2K, 2,000 Optional: Device METAID20K, 20,000 Server METAIDIM, 1,000,000
Credential (1:1)	METAIDxPIN, 1,000,000; METAIDxCard, 1,000,000
Anti-spoofing	Pictures, Videos, Masks, Deepfake
Access Log Capacity	50,000 in default; Max. 3,000,000

Management : IAMS-b in Windows OS	
Features	User and group management Access logs and time attendance sheets Advertisement Mode/Power Saving mode Access log management
Mobile APP	Android and iOS
Event Log	Registration, Access, Blacklist, Stranger, Visitor, Card No.

Card Reader(Optional)	
HID* OMNIKEY	HF (13.56 MHz): Seos* ICLASS ICLASS SE ISO 14443A (MIFARE) CSN ISO 14443B CSN DESFIRE EV1/2/3 LF (125 kHz): HID PROX* Mobile Wallet: NFC/BLE (Google, Apple)
PIDF	HF (13.56 MHz): Mifare, Mifare Ultralight, Mifare DESFire, NFC Tag LF (125 kHz): EM ASK, H.L.D. FSK

3. Power Adapter

The adapter is shown in the diagram below. The power input can support 100V~240V and 50/60Hz, and the output is 12V/3A.

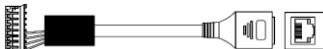


4. Instructions for Connecting the Cable and Rear Panel Connector

4-1 DC Jack Cable :



4-2 LAN Cable :



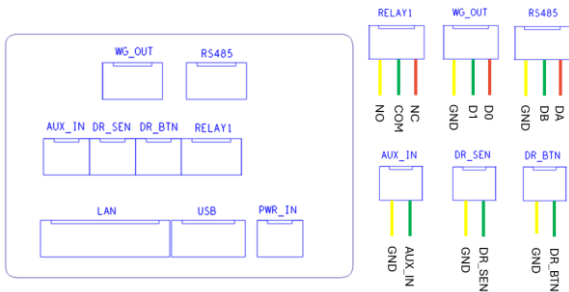
4-3 USB Cable :



4-4 3-Pin IO Cable :



4-5 2-Pin IO Cable:



5. Product Installation

Before installation, the mounting height of the main unit must be determined. For MIA-3DSTc7u series models, it is recommended that the bottom of the device be positioned 1.3 to 1.35 meters above the ground. This allows for the recognition of individuals with heights ranging from 1.48 to 1.90 meters. The optimal measurement distance is 0.4 to 1 meter, as illustrated in the diagram below:

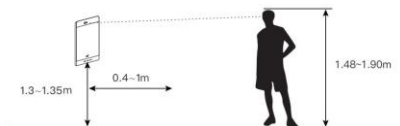
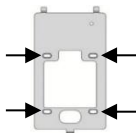
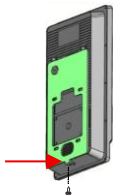


Diagram of the main unit installation height



When the main unit is installed on a wall with an 86-type mounting box, the mounting plate can be directly secured to the box using flat-head screws. If there is no mounting box inside the wall, use a drill to make holes, install expansion screw tubes, and then secure the mounting plate with screws. Refer to the diagram on the left for guidance.

◀ Installing the wall-mounted bracket



Have the main unit on the wall-mounted bracket, then secure it by tightening the screws at the bottom to complete the installation. Refer to the diagram on the left for guidance.

◀ Securing the main

6. Operation Environment

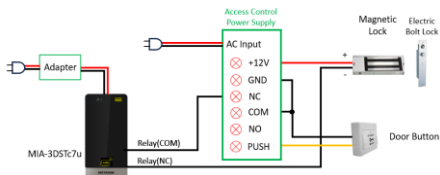
Please use your product according to the following basic environmental requirements:

- Operating temperature: -10 to 55°C (optional low-temperature operation from -35 to -10°C)
- Operating humidity: 10% to 90% RH, non-condensing
- Storage temperature: -10 to 60°C

7. Access Control Signal Connection Diagram

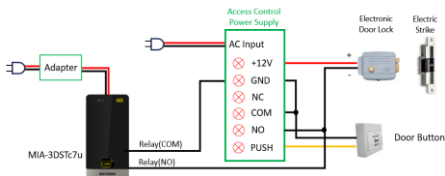
7-1 Connection between MIA-3DSTc7u and Lock

A. Fail Safe Lock - Magnetic Lock, Electric Bolt Lock



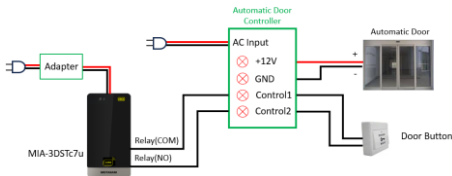
The negative pole (-) of the door lock is connected in series to the MIA-3DSTc7u device. When the device's relay is triggered or the Door Button is pressed, the negative pole (-) of the door lock is disconnected for cutting off power to the lock and thereby unlocking the door.

B. Fail Secure Lock – Electric Strike, Electronic Door Lock



The negative pole (-) of the door lock is connected in parallel to the MIA-3DSTc7u device. When the device's relay is triggered or the Door Button is pressed, the negative pole (-) of the door lock is connected for supplying power to the lock and unlocking the door.

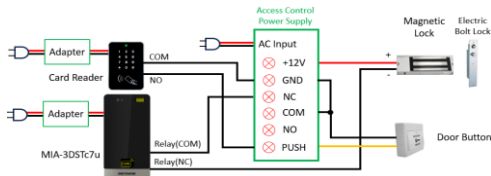
C. Automatic Door



Both MIA-3DSTc7u device and Door Button are connected to the Access Door Controller. When the device's relay is triggered or the Door Button is pressed, it triggers the Automatic Door Controller to unlock the door.

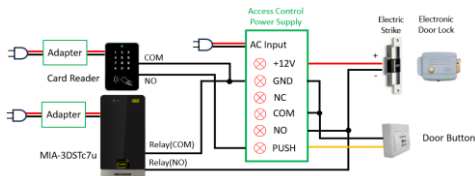
7-2 Connection for MIA-3DSTc7u and Card Reader

A. Fail Safe Lock - Magnetic Lock, Electric Bolt Lock



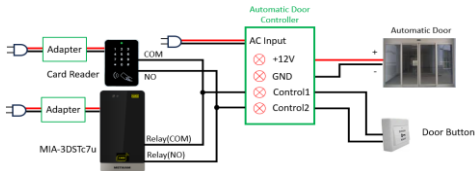
The negative terminal (-) of the door lock is connected in series to the MIA-3DSTc7u device (NC) and the Access Control Power Supply. The card reader and Door Button are connected to Access Control Power Supply. When the device's relay is triggered, or the card is successfully swiped, or Door Button is pressed, the negative terminal (-) of the door lock will be disconnected and the door will be open.

B. Fail Secure Lock – Electric Strike, Electronic Door Lock



The negative terminal (-) of the door lock is connected in series to the MIA-3DSTc7u device (NO) and the Access Control Power Supply. The card reader and Door Button are connected to Access Control Power Supply. When the device's relay is triggered, or the card is successfully swiped, or Door Button is pressed, the negative terminal (-) of the door lock will be disconnected and the door will be open.

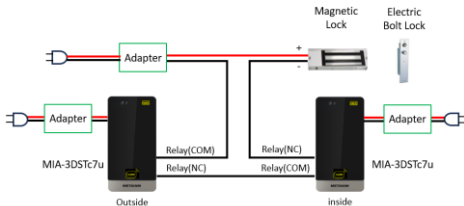
C. Automatic Door



The MIA-3DSTc7u device, card reader, and Door Button are all connected to the control signal lines of the Automatic Door Controller. When the device's relay is triggered or the Door Button is pressed, the two control signal lines of the Automatic Door Controller will be connected, and then the motor of automatic door will be driven to open the door.

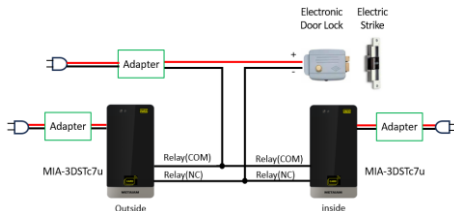
7-3 Dual devices outside and inside the door

A. Fail Safe Lock - Magnetic Lock, Electric Bolt Lock



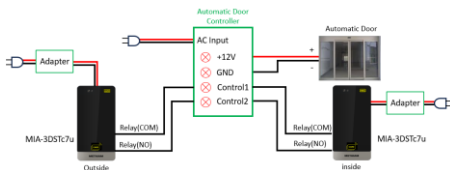
The negative terminal (-) of the door lock is connected in series with two MIA-3DSTc7u devices. When either device activates the relay, the negative terminal (-) of the door lock will be disconnected and the door will be open.

B. Fail Secure Lock – Electric Strike, Electronic Door Lock



The negative terminal (-) of the door lock is connected in parallel with two MIA-3DSTc7u devices. When either device activates the relay, the negative terminal (-) of the door lock will be disconnected and the door will be open.

C. Automatic Door



Both MIA-3DSTc7u devices are connected to the control signal lines of the Automatic Door Controller. When the device's relay is triggered, the two control signal lines of the Automatic Door Controller will be connected, and then the motor of automatic door will be driven to open the door.

8. Operation Guidelines

Do not turn off the device during startup. Wait until the identity recognition interface appears and the 'Loading...' message disappears before powering off.

Once the device is turned on, the identity recognition interface will display "Loading...". Please wait for this message to disappear before performing any recognition tasks or settings.

9. Hardware Reboot (via Pin Tool)

Pin Tool :



- Use the restart button on the main unit to perform a hardware reboot. This should be done while the device is powered on.
- Use the pin tool provided with the product to perform a hardware reboot. To reboot the device, insert the pin tool into the reset hole, press and release it, the device will restart.

10. Common Recognition Issues and Solutions

- Duplicate ID detected
- Failure to follow modeling requirements
- Significant difference between the model and the real person
- There is a significant difference between the hairstyle during recognition and the hairstyle at the time of facial model registration

To resolve these issues, delete the existing METAiD model and re-register the user's METAiD.

11. Administrator Password Setup

It is strongly recommended to set an administrator password immediately after completing the installation and configuration to make sure only the administrator can change the configuration. After entering the access control settings page, click on "Admin Password", enter a 6-digit password, and then click "SAVE". The system will return to the access control settings page and display a success message.

Note: If the administrator password is lost and the settings page cannot be accessed, the administrator password can only be changed through the management system.