

MT168 User Manual and Installation Guide

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About This Manual

Thank you for purchasing the TASHI product.

This manual explains how to install, operate and maintain our product.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, such as photocopying, recording, or information storage and retrieval systems, without permission in writing from the manufacturer. The material in this manual is subject to change without notice.

Regulatory Compliance Statements

FCC Warning Statement

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

1. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure requirements, avoid direct contact to the transmitting antenna during transmitting.
3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure Statement

For body contact during operation, this device has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 20 cm from the body.

Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

European Conformity Statement

TASHI smartech co., Ltd here with declares that the TASHI product is in compliance with the essential requirements and all other provisions of the R&TTE 1999/5/EC directive, the EMC 2004/108/EC directive and the Low Voltage 2006/95/EC directive.

The declaration of conformity is available for download at:

<https://portal.unitech.eu/public/Safetyregulatorystatement>

Waste electrical and electronic equipment (WEEE)



unitech group has set up a policy and process to meet the EU directive 2002/96/EC and update 2003/108/EC concerning electronic waste disposal.

For more detailed information of the electronic waste disposal of the products you have purchased from unitech group directly or via unitech group's resellers, you shall either contact your local supplier or visit us at :

<https://portal.unitech.eu/public/WEEE>

RoHS Statement



This device conforms to RoHS (Restriction Of Hazardous Substances) European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

限用物質含有情況標示聲明書

Declaration of the Presence Condition of the Restricted Substances Marking

設備名稱： 家庭門口機 ， 型號（型式）：MT168		Equipment name					Type designation (Type)				
單元 Unit	限用物質及其化學符號										
	Restricted substances and its chemical symbols										
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)					
電路板總成	○	○	○	○	○	○					
塑膠/鋅合金機構件	○	○	○	○	○	○					
配件(例: 金屬壁掛架..等)	○	○	○	○	○	○					
備考1. “超出0.1 wt %” 及 “超出0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。											
Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.											
備考2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。											
Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.											
備考3. “—” 係指該項限用物質為排除項目。											
Note 3 : The “—” indicates that the restricted substance corresponds to the exemption.											

California Proposition 65



台灣 NCC 警告聲明

低功率電波輻射性電機管理辦法

第十二條：經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條：低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

低功率射頻電機需忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

LED Information

The TASHI product contains LED indicator(s) or LED ring whose luminance is not harmful to human eyes during normal operation, user maintenance or prescribed service operations.

*LED information only applies to the products with LED components.

Storage and safety notice

Although charged batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens, they will require recharging prior to use. Batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at higher temperatures. It is recommended to store batteries at room temperature.

** The message above only applies to the usage of the removable batteries.*

For the products with non-removable batteries / without batteries, please refer to the specification of each product.

Product Operation and Storage Notice

The TASHI product has applicable operation and storage temperature conditions. Please follow the limitation of suggested temperature conditions to avoid failure, damage or malfunction.

**For applicable temperature conditions, please refer to the specification of each product.*

Adapter Notice

1. The bundled power adapter that comes with your TASHI product is not meant to be used outdoors. An adapter exposed to water or rain, or a very humid environment can cause damage to both the adapter and the product.
2. Please only use the bundled power adapter or same specification of adapter to charge your TASHI

product. Using the wrong power adapter can damage your TASHI product.

** The message above only applies to the product connected to the adapter.*

For the products without using the adapters, please refer to the specification of each product.

Hearing Damage Warning

Zx.3 Warning

The warning shall be placed on the equipment, or on the packaging, or in the instruction manual and shall consist of the following:

- the symbol of Figure 1 with a minimum height of 5 mm; and
- the following wording, or similar :

To prevent possible hearing damage, do not listen at high volume levels for long periods.



Figure 1 – Warning label (IEC 60417-6044)

Alternatively, the entire warning may be given through the equipment display during use, when the user is asked to acknowledge activation of the higher level.

Warranty Policy

The following items covered under the TASHI Limited Warranty are free from defects during normal use:

The warranty period is varied from each country. Please consult with your supplier or TASHI local office for actual length of warranty period to your purchased product.

Warranty becomes void if equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Chapter 1

Introduction

MT168 Facial Recognition T&A Terminal

This manual is provided for user reference, including the introduction, installation and other reference information of MT168.


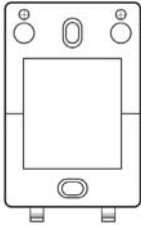
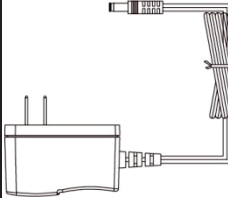

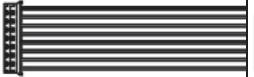




MT168, a ready T&A solution device is powered by Android 8.1 Octa-Core platform, Providing fine package of live facial recognition Time & Attendance App with 13.56 Mhz reading access control. It offers users an exceptional value in cost and functional performance on daily operation and shift work management.

Chapter 2

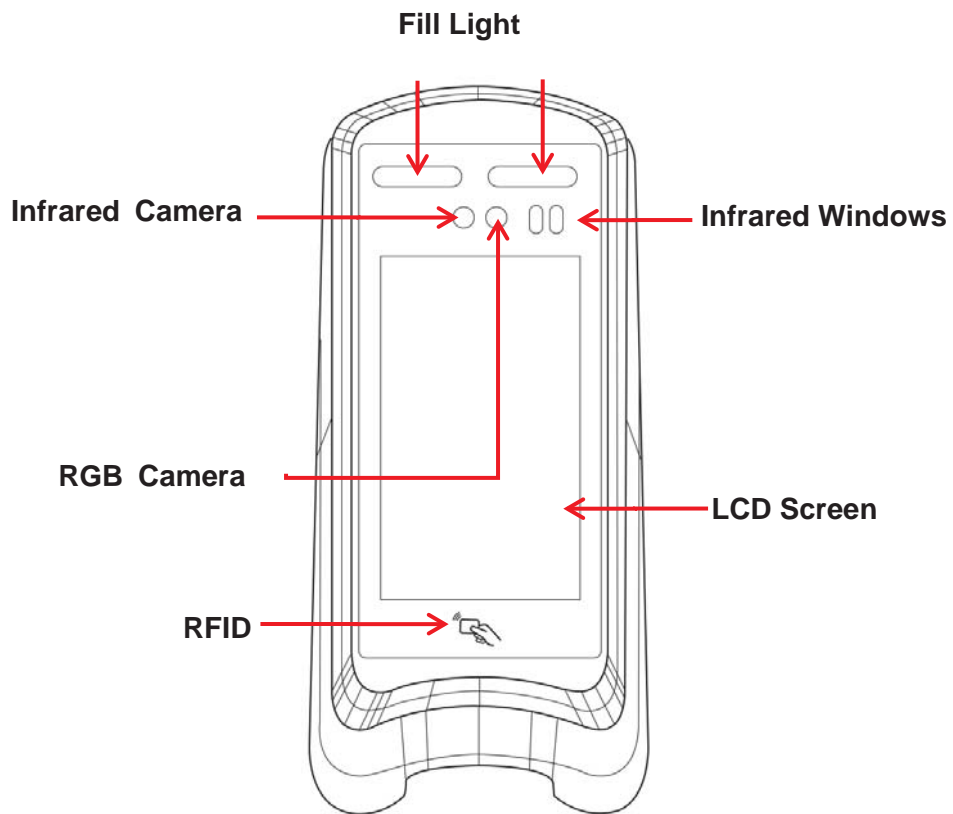
Package and Interface Overview

Packing

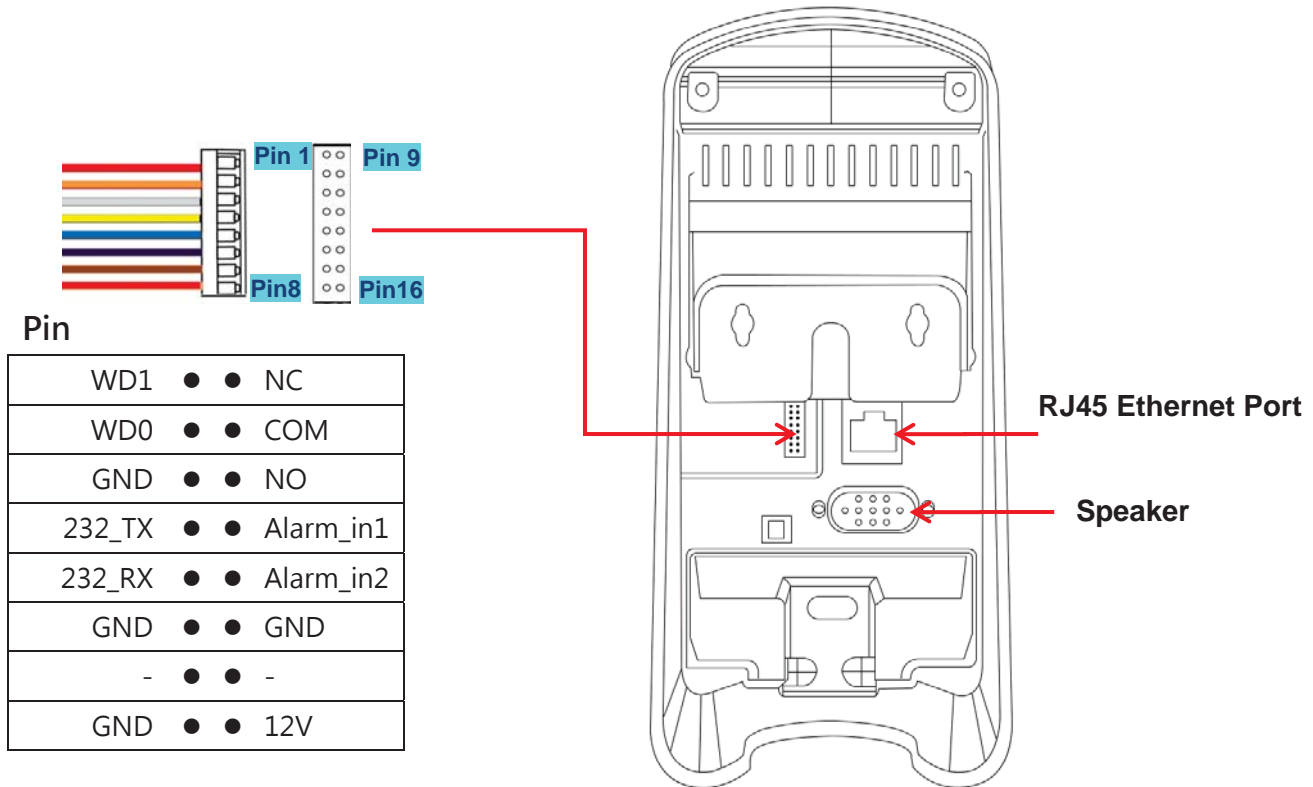
Please make sure the following contents are in the MT168 box. If anything appears missing or damaged, please contact the TASHI representatives.

				
MT168		Wall Mount	Power Adapter	M3 Screw *2
				
Power & Communication Cable (16 pins)	Power Cable	QRG QR Code Label on Gift box for download	ST4x20 Screw *4	Screw Fixing Seat *4

Front view



Rear view



Pin	Wire Color	Name
1	Black	WD1
2	White	WD0
3	Gray	GND
4	Purple	232_TX
5	Green	232_RX
6	Yellow	GND
7	-	-
8	Black	GND
9	Red	NC
10	Orange	COM
11	White	NO
12	Yellow	Alarm_in1
13	Blue	Alarm_in2
14	Green	GND
15	-	-
16	Red	12V

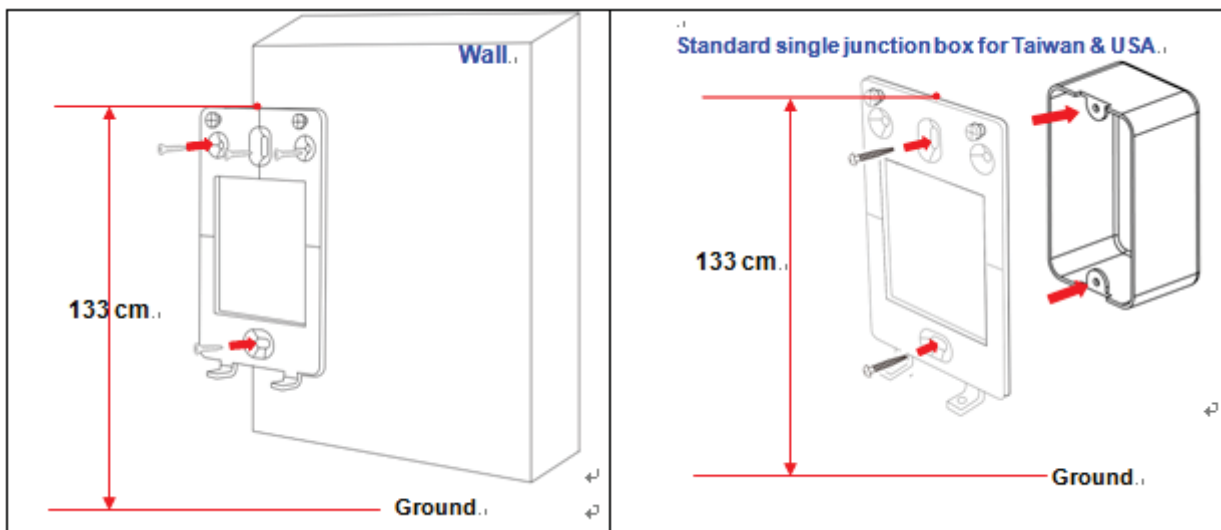
Chapter 3

Installation

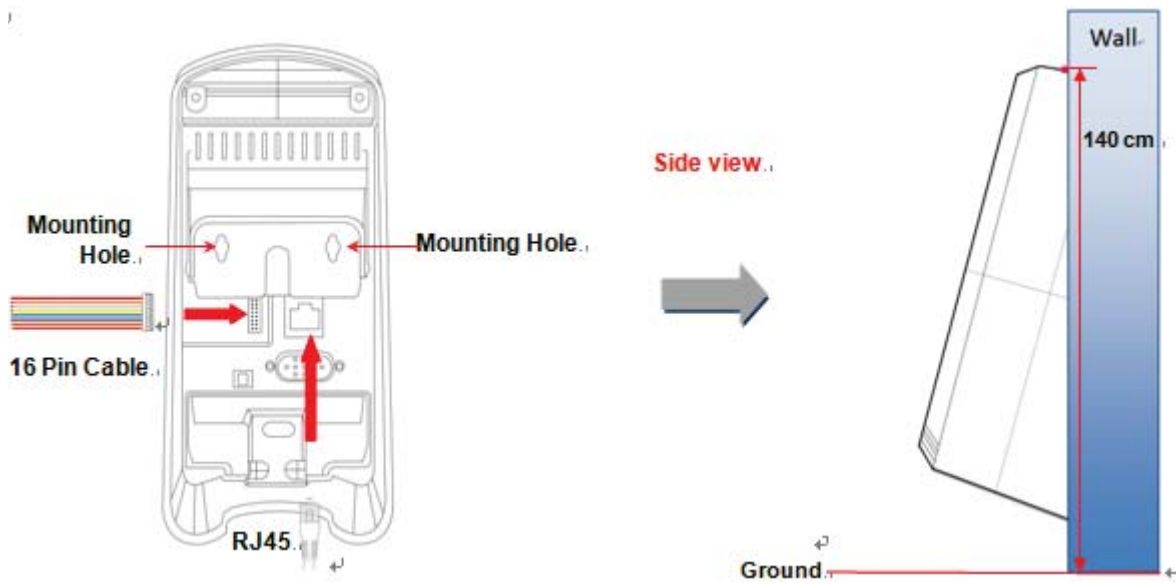
Installation

This section explains how to install the MT168

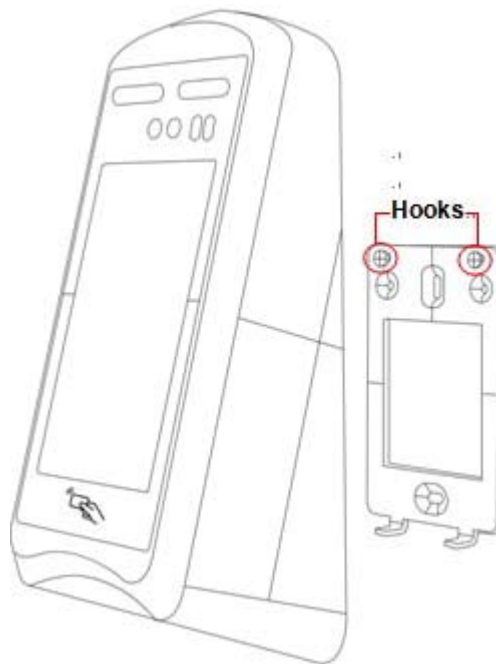
1. Fit the wall mount bracket in the direction as shown onto the wall by four Expansion Bolts, or fix the wall mount with the single junction box by two standard screws. Installation height from top of wall mount to ground is 150CM show as in below diagrams.



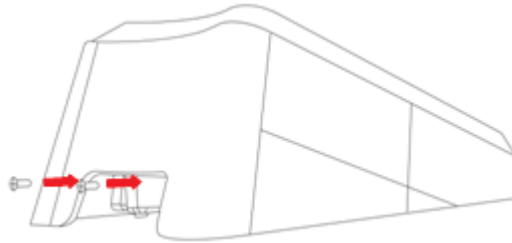
2. Plug RJ45 and power & communication cable into socket. For on wall installation of MT168 without single junction, all cables, wires and a power plug need to go through outlet under MT168, as shown in below diagram.



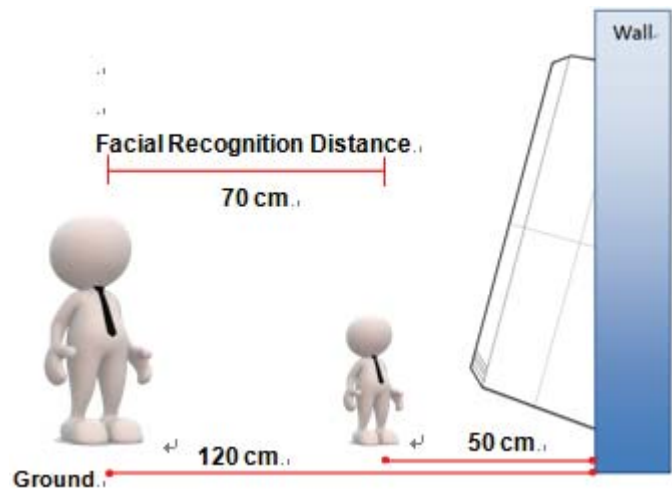
3. Fit MT168 onto the wall mount kit by aligning the mounting holes (the rear side of MT168) to the hooks (the wall mount), and then lift MT168 vertically downwards and push to the end, as shown on below diagram.



4. Tighten the M3 Screws, shown as below diagram. Please be reminded that incorrect to use other kinds of screws causing damages will not be covered by warranty.



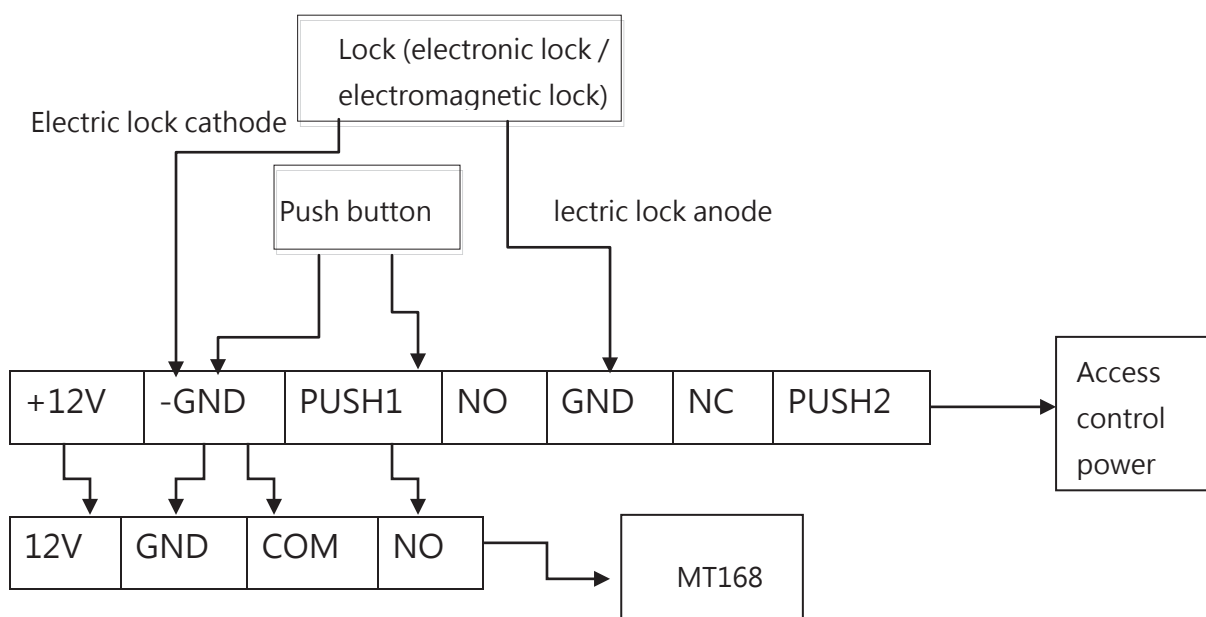
5. The suitable distance for facial recognition, from 50 cm to 120 cm from the wall, suitable for the height of 150 to 185 cm. 70 cm is the proper distance for facial recognition, as show in below diagrams.



Getting Started

Wiring diagram

Connect the door lock / access controller



Note: Please cut off the power when wiring, make sure the wires are connected, and then turn on the power. Do not operate with power on.

Remark

1. It is recommended that the connection distance between the device and the access controller is not more than 50 meters (If longer transmission time is required or there is interference in the operating environment, please use Wiegand signal expander).

Regardless of whether the device shares power with the access controller, you must ensure that the device and the access controller share the same ground to ensure the stability of the Wiegand signal.

Communication settings

The system can communicate with the device through 2 communication methods (RS232, TCP / IP) for data exchange and remote management via TCP / IP.

1. TCP / IP communication method

When the device communicates with the system, the device and system need to be on the same network segment. For details, please consult the relevant technical staff.

Note:

1. Please connect other wires before connecting the power cord. If the machine is found to be unable to operate normally, please disconnect the main power switch before carrying out necessary inspection.

2. In places with serious static electricity or in winter, please first ground the wires and then connect other wires to prevent excessive static electricity from damaging the machine

Appendix A

System Specifications

The following table shows the MT168 system specifications:

OS	Android 8.1, OctaCore, 1.5Ghz CPU, GPU
Memory	2GB RAM · 8GB ROM
Power Management	DC 12V/2.08A
Camera	RGB & Infrared Camera 2 megapixels · Progressive scan CMOS Resolution: 1600 x 1200
LCD	5" , 800 x 480
I/O	RS-232 & TCP/IP Wiegand: 26/34 outputs
Network	10M/100M
RFID	13.56MHz
Mounting Kits	Wall Mount
Size	214.7mm(L) x 103.9mm(W) x 75.7mm(H)
Temperature	-10°C-50°C
IP Rating	IP42 (front panel)
Global Approvals	NCC, BSMI, CE, FCC

Appendix B

Worldwide Support

At Unitech group, we have a professional support team to answer your questions or any related technical issues. If the equipment problem occurs, you may contact our regional services representatives to get the quick response. We have seven regional services centers, and choose your region to get our quick support and their contact information can be found in our websites provided as below.

Region	Website
TASHI Smartech	http://www.tashi.ute.com
Global Operation Center	http://www.ute.com
Unitech Taiwan	http://tw.ute.com
Unitech Asia Pacific & Middle	http://apac.ute.com
	http://india.ute.com
Unitech China	http://cn.ute.com
Unitech Japan	http://jp.ute.com
Unitech America	http://us.ute.com
	http://can.ute.com
Unitech Europe	http://eu.ute.com

In addition, you could contact TASHI Smartech by TASHI@tashi.ute.com

FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- - Reorient or relocate the receiving antenna.
- - Increase the separation between the equipment and receiver.
- - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- - Consult the dealer or an experienced radio/TV technician for help.

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.