Delta Infrasuite
Data Center Infrastructure Solutions

Point of Delivery
User Manual

www.deltapowersolutions.com
This manual contains important instructions and warnings that you should follow during the installation, operation, storage and maintenance of this product. Failure to heed these instructions and warnings will void the warranty.
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Chapter 1 : Important Safety Instructions

1.1 Safety Precautions

**WARNING:**

When the Point of Delivery (hereafter refer to as POD) is in operation, the voltage in the cabinet may be fatal. Only qualified service personnel can carry out maintenance and installation.

- When operating the POD in an energized state, please use safety devices (such as insulating gloves and shoes) and operate on an insulating rubber cushion to avoid electrical shock. There should be at least one person to give assistance. In case of an accident, you should be adaptable and seek assistance.

- Before actually operating and maintaining the POD, please read all chapters in this manual carefully. To avoid personal injury and equipment damage, please be sure to follow the instructions in the user manual and marks on the unit to operate.

- The adjustable levelling feet at the bottom of the POD can only be used to fix and maintain the cabinet level. Please do not use it to lift the unit to replace the movable floor, which may result in personal injury or equipment damage.

1.2 Installation Precautions

- Please install the POD in indoor environments where humidity, temperature and dust is well controlled without direct sunshine.

- Please maintain a satisfactory clearance around the POD for easy maintenance and operation.

- Please do not install the POD on flammable or unstable ground.

1.3 Usage Warnings

- Please do not install and operate the POD in a place with humidity, water, gas and near the electrical heat source.

- To safeguard personal safety and ensure normal operation of the device, please make sure to disconnect the power supply before installation or maintenance.

- Good heat dissipation can ensure stable operation of the POD. Please keep ventilation around the cabinets.

- To avoid electrical leakage endangering personal safety, please ensure sound grounding of the POD before switching on the power.
Chapter 2 : Introduction

2.1 General Overview
Point of delivery (hereafter referred to as POD) is a new generation of integrated modular data center product, which adopts integrated integration scheme. It has the characteristics of high availability, high adaptability and intelligent management.

High Availability
- Separation Wiring for Power Cables and Signal Cables to prevent interference
  POD has power cables frame and signal cables frame, which perfectly separates power cables and signal cables to avoid interference.
- Dimension adjustable for skylights and ladders
  POD can realize the adjustability of hot and cold passage from 600mm to 1200mm, you can choose the width that is most suitable for your site, improve the flexibility of data center and reduce the occupancy rate of the site.

High Adaptability
- Uniform and beautiful appearance
  Appearance of UPS, cooling, cabinet is consistent, and perfect combination with the wiring system.

Intelligent Management
- Electric Door
  The POD has Electric Doors. The entering method for the electric door is "swipe card + password + fingerprint", and the leaving method is "button". The electric door can be set with two modes: normally open or automatic, so as to improve the security and reliability of the POD.
- 10" Touch Panel
  The 10inch touch panel of the POD displays information for Delta DPH75kVA UPS, Delta Power Distribution Cabinet and Delta Infrasuite RowCool Precision Cooling Unit.
2.2 Typical configuration of the POD
The POD consists of the Delta InfraSuite Modular Rack, Delta DPH75kVA UPS, Delta Power Distribution Cabinet, Delta Infrasuite RowCool Precision Cooling Unit, Sealed Passage, Electric Door, Glass Skylight, Metal Skylight, Cable Ladder, Power Cable Trough with Through-hole and other components. The Delta InfraSuite Modular Rack quantities are 4-14pcs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension (W x D x H)</td>
<td>600 mm POD: 2700 mm × 3400 mm x 2200 mm</td>
</tr>
<tr>
<td>Delta InfraSuite modular Rack</td>
<td>4 pcs ~ 14 pcs</td>
</tr>
<tr>
<td>Electrical specification</td>
<td>220/380V, 230/400V, 240/415V, Y 3Ø+N, 50/60 Hz</td>
</tr>
<tr>
<td>Total Power Consumption</td>
<td>50kW</td>
</tr>
<tr>
<td>Power Factor/cabinet</td>
<td>Average 4kW/ cabinet (self-adjustable)</td>
</tr>
<tr>
<td>Passage</td>
<td>Hot or cold passage, 600-1200 mm width adjustable</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>0 m ~ 1000 m</td>
</tr>
<tr>
<td>Installation method</td>
<td>Floor or floor stand</td>
</tr>
</tbody>
</table>
3.1 Delta InfraSuite modular Rack

The modular rack is an essential gear for data centers. Delta has developed a modular rack that increases space utilization and heat dissipation via 70% perforation rate to meet high density IT room requirements.

Convenience

- Tool-less installing, removing, and reversing front and rear doors
- Removable power trough on the roof neatly managing power, network and optic cables
- Tool-less removable roof cable ports for easier cable access and management
- Removable bottom cover allowing cable access through raised floor
- Casters for convenient moving
- Front and rear U-position numbers for easy installation
- Easy to join racks in a row for a clean and secure data room
- Front and rear doors open up to 130° for convenient installation and repair
- Full range of accessories supporting a well-managed and organized data room

Flexibility

- Split rear doors reducing space required for hot aisles and simplifying maintenance
- Adjustable mounting rails with numbered guides helping adjust depth for different installation needs
- Four multipurpose mounting bays for installing 0U PDU or vertical cable trough
- Fully meets industry-standard EIA-310 rack requirements

Safety

- Supporting up to 1000kg static weight
- IP20 environment protection rating
- Adjustable leveling feet for stability and security
- Front and rear doors are grounded to the rack
- Front and rear doors with locks
3.2 Double-row Sealed Passage

Double-row sealed passage is divided into two scenarios: sealed cold passage and sealed hot passage. Taking sealed cold passage as an example, the components of sealed passage are as follows.

(Figure 3-1: Sealed Cold Passage)

(1) Metal Skylight
(2) Cable Ladder
(3) Glass Skylight
(4) Power Cable Trough with Through-hole
(5) Cable Trough with Through-hole
(6) Camera Combination
(7) Fingerprint Card Reader
(8) Electric Door
### 3.2.1 Metal Skylight

The metal skylight is mainly used for sealing the passage of the POD and fixing the environmental control accessories. The environmental control accessories are Smoke Sensation/ EnviroProbe 1000/ Safety Light Curtain/ Radar Switch/ Camera. Please refer to the figure below.

(1) Smoke sensation
(2) Safety light curtain
(3) Camera
(4) EnviroProbe 1000
(5) Radar switch

**NOTE:**
You need install above products after you receive these products.

The metal skylight can achieve the expansion through the sliding of two metal plates, and realize the automatic adjustment of passage width from 600 mm to 1200 mm. 761-1011 mm is used for 600-850 mm passage width, and 1011-1361 mm is used for 851-1200 mm passage width. The parameters are as follows:

<table>
<thead>
<tr>
<th>Metal Skylight</th>
<th>Dimension (H × W × D)</th>
<th>Suitable Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 mm × 600 mm × (761-1011) mm</td>
<td>2000 mm × 600 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 600 mm × (1011-1361) mm</td>
<td>2000 mm × 600 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 800 mm × (761-1011) mm</td>
<td>2000 mm × 800 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 800 mm × (1011-1361) mm</td>
<td>2000 mm × 800 mm × 1200 mm</td>
</tr>
</tbody>
</table>
When the width of POD passage is 1200 mm, slide the metal skylight to the mark 1200 mm (the mark is printed in the metal plate). The length of the metal skylight is 1361 mm. See below figure.

When the width of POD passage is 850 mm, slide the metal skylight to the mark 850 mm (the mark is printed in the metal plate). The length of the metal skylight is 1011 mm. See below figure.

The dimension mark is as below figure:
3.2.2 Cable Ladder

The main function of the cable ladder is to realize the connection between the power line and the signal line between the two module racks. Similarly, the cable ladder also has the design of adjusting the length to adapt to the length difference caused by the passage width change or the hot and cold passage change. Please refer to the figure below.

<table>
<thead>
<tr>
<th>Cable Ladder</th>
<th>Dimension (H × W × D)</th>
<th>Suitable Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POD passage width 600-850 mm:</td>
<td>2000 mm × 600 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>50 mm × 300 mm × (1332-1582) mm</td>
<td>2000 mm × 600 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>POD passage width 851-1200 mm:</td>
<td>2000 mm × 800 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>50 mm × 300 mm × (1582-1832) mm</td>
<td>2000 mm × 800 mm × 1200 mm</td>
</tr>
</tbody>
</table>

Take 851-1200mm passage width as an example, as below figure:
3.2.3 Glass Skylight
The glass skylight is mainly used for sealing the passage of the POD and fixing the LED lamp. At the same time, it has the function of adjusting the length to adapt to the length difference caused by the passage width change or the hot and cold passage change. Please refer to the figure below.

![Glass Skylight Diagram]

NOTE:
You need to install the LED lamp after you receive it.

The glass skylight can achieve the expansion through the sliding of two metal plates, and realize the automatic adjustment of passage width from 851 mm to 1200 mm. 761-1011 mm is used for the 600-850 mm passage width, and 1011-1361 mm is used for the 851-1200 mm passage width. The parameters are as follows:

<table>
<thead>
<tr>
<th>Cable Ladder</th>
<th>Dimension (H × W × D)</th>
<th>Suitable Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 mm × 300 mm × (761-1011) mm</td>
<td>2000 mm × 300 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 300 mm × (1011-1361) mm</td>
<td>2000 mm × 300 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 600 mm × (761-1011) mm</td>
<td>2000 mm × 600 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 600 mm × (1011-1361) mm</td>
<td>2000 mm × 600 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 800 mm × (761-1011) mm</td>
<td>2000 mm × 800 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td>100 mm × 800 mm × (1011-1361) mm</td>
<td>2000 mm × 800 mm × 1200 mm</td>
</tr>
</tbody>
</table>
When the width of POD passage is 1200 mm, slide the skylight to the mark 1200 mm (the mark is printed in the metal plate). The length of the skylight is 1361 mm. See below figure.

![Diagram showing skylight with dimensions 1361.0 mm]

When the width of POD passage is 850 mm, slide the skylight to the mark 850 mm (the mark is printed in the metal plate). The length of the skylight is 1011 mm. See below figure.

![Diagram showing skylight with dimensions 1011.0 mm]

The dimension mark is as below figure:
3.2.4 Power Cable Trough with Through-hole
The Power Cable Trough with Through-hole is mainly used for the arrangement of power cables and isolation from signal wires to prevent signal interference. The Power Cable Trough has three kinds of products: 300W/ 600W/ 800W. The Power Cable Trough is stuck on the top of the rack. Please refer to the table below for parameters.

<table>
<thead>
<tr>
<th>Power Cable Trough with Through-hole</th>
<th>Dimension (H × W × D)</th>
<th>Suitable Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>300W: 192.3 mm × 295 mm × 296.3 mm</td>
<td>2000 mm × 300 mm × 1090 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000 mm × 300 mm × 1200 mm</td>
<td></td>
</tr>
<tr>
<td>600W: 192.3 mm × 580 mm × 316.3 mm</td>
<td>2000 mm × 600 mm × 1090 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000 mm × 600 mm × 1200 mm</td>
<td></td>
</tr>
<tr>
<td>800W: 192.3 mm × 780 mm × 316.3 mm</td>
<td>2000 mm × 800 mm × 1090 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000 mm × 800 mm × 1200 mm</td>
<td></td>
</tr>
</tbody>
</table>

- 300W Power Cable Trough with Through-hole:

- 600W Power Cable Trough with Through-hole:

- 800W Power Cable Trough with Through-hole:
3.2.5 Cable Trough with Through-hole

The Cable Trough with Through-hole is mainly used for the arrangement of signal cables and isolation from power cables to prevent signal interference. The Cable Trough with Through-hole has three kinds of products: 300W/600W/800W. The Cable Trough with Through-hole is stuck on the top of the rack. Please refer to the table below for parameters.

<table>
<thead>
<tr>
<th></th>
<th>Dimension (H × W × D)</th>
<th>Suitable Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Trough</td>
<td>300W: 126.2 mm × 295 mm × 75 mm</td>
<td>2000 mm × 300 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mm × 300 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>600W: 126.5 mm × 592 mm × 75 mm</td>
<td>2000 mm × 600 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mm × 600 mm × 1200 mm</td>
</tr>
<tr>
<td></td>
<td>800W: 126.5 mm × 792 mm × 75 mm</td>
<td>2000 mm × 800 mm × 1090 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mm × 800 mm × 1200 mm</td>
</tr>
</tbody>
</table>

- 300W Cable Trough with Through-hole:

- 600W Cable Trough with Through-hole:

- 800W Cable Trough with Through-hole:
3.2.6 Camera (optional)
The camera on the outside of POD is mainly used to monitor and record the usage situation for the 10inch Touch Panel and Fingerprint Card Reader. Please refer to the following figure for details.

(1) Fixed base
(2) Camera

NOTE:
If you want to buy Camera mentioned above, please contact your local dealer or customer service.
3.2.7 Fingerprint Card Reader

POD has two Fingerprint Card Readers for front panel and rear panel separately. The front door fingerprint card reader combination is mainly used for fixing the 10inch touch panel and the fingerprint card reader. The touch panel is used to display the information for the POD. The front door fingerprint card reader controls the switch of the front electric sliding door. The rear door fingerprint card reader combination is mainly used for fixing the rear door fingerprint card reader and controlling the switch of the rear electric sliding door.

For details, please refer to below Figure.

(1) Fixed base for the front door fingerprint card reader
(2) 10" touch panel
(3) Fingerprint card reader
(4) Fixed base for the rear door fingerprint card reader
3.2.8 Electric Door

The electric door is divided into two types according to the width of the passage. When the width of the passage is between 600-850 mm, please select the single electric door. When the width of the passage is between 851-1200 mm, please select the double electric door. For details, please refer to the below figure.

Single Electric Door Dimension:
H × W × D: 1916 mm × 940 mm × 30 mm

Double Electric Door Dimension:
H × W × D: 1916 mm × 1290 mm × 30 mm
3.3 Power Distribution Cabinet
Delta Power Distribution Cabinet (hereafter referred to as PDC) provides excellent branch protection and branch monitoring functions. You can flexibly choose different power levels according to your power demands to your system. The PDC includes two models, PDC-50K-400Y400Y-1N and PDC-50K-400Y400Y-2N.

The PDC can be installed with Transient Voltage Surge Suppressors (TVSS) to protect highly sensitive equipment. With a built-in Power Meter, the LCD display allows you to easily know the system status and parameters. Various built-in communication interfaces (smart slots, RJ45 and dry contacts) allow you to monitor and set the PDC through the workstation and external devices.

Please see Figure 3-2 for the Exterior & Dimensions of the PDC.

![Figure 3-2: PDC Exterior & Dimensions](image)

3.3.1 EnviroStation EMS2000
The PDC also installs Delta EnviroStation EMS2000, the EnviroStation EMS2000 monitors and controls environmental conditions through peripheral devices to ensure that your equipment is protected from critical conditions such as high temperature, humidity or water leakage. This product works seamlessly with temperature and humidity sensor EnviroProbes and other environment monitoring devices.
3.3.1.1 EnviroStation EMS2000 Accessories

The EnviroStation’s below accessories are for the POD connection:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Q'ty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sensor HUB adapter</td>
<td>8 PCS</td>
</tr>
<tr>
<td></td>
<td>Terminal block (for Sensor HUB adapter)</td>
<td>8 PCS</td>
</tr>
<tr>
<td>2</td>
<td>Alarm Beacon</td>
<td>1 PC</td>
</tr>
<tr>
<td>3</td>
<td>Bracket ear (including cage nuts and screws)</td>
<td>1 SET</td>
</tr>
<tr>
<td>4</td>
<td>Door contact sensor</td>
<td>1 SET</td>
</tr>
<tr>
<td>5</td>
<td>AC power cord</td>
<td>1 PC</td>
</tr>
</tbody>
</table>

NOTE:
Please find the EMS2000 accessories in the PDC.
3.3.1.2 Sensor HUB
In the accessory box you can find eight provided Sensor HUB adapters (RJ45 to 6-pin terminal connector) which are used to connect peripheral devices for purposes such as smoke, fire and door contact detection. To connect a Sensor HUB device, please see the following instructions:

- Connect a Sensor HUB adapter to a Sensor HUB port on the rear panel with a standard CAT5 cable.
- On the other side of the adapter, plug a 6-pin terminal block (provided with the package) into the green terminal connector so wires from peripheral devices can be tightened and fixed with the screws.
- Depending on the contact types and power requirement of the devices you are connecting, different terminal connections are required. Please see the following figures:

1) +12Vdc is provided by connecting the following two terminal points: 12V and G (12V).
2) +24Vdc is provided by connecting the following two terminal points: 24V and G (24V).

3) Connect Dry Contact signal to G (12V) and – terminal points.

4) Connect Wet Contact signal to + and – terminal points. The active rating is 5~24Vdc, 1~9mA.

**NOTE:**
For HUB1/ HUB2, you can manually turn on/ off power or enable automatic power control. Please see *User Manual of EnviroStation EMS2000, Chapter 5.2.1 Management – Sensor HUB*.

### 3.3.1.3 Relay Output
EnviroStation provides two Relay Outputs which can be used in cooperation with Digital/ Analog Input devices to take appropriate actions when events are reported. The power rating is 26Vdc, 0.8A. Please see the following illustrations for the terminal configurations:
3.3.1.4 Alarm Beacon
The Alarm Beacon can be installed in visible locations and triggered by specific events to alert you to any unusual situations. To install the Alarm Beacon, a provided terminal block and a Sensor HUB adapter are needed.

**Step 1** Plug the terminal block into the green terminal connector of the Sensor HUB adapter.

**Step 2** Connect the positive wire (+) from the Alarm Beacon to the 12V terminal on the terminal block, and the negative wire (-) to the G (12V) terminal. Make sure that the screws on the connected terminals are tightened properly.

**Step 3** Use a standard CAT5 cable to connect the RJ45 connector of the adapter to the Sensor HUB1/ HUB2 on the rear panel of the EnviroStation.

**Step 4** Place the Alarm Beacon in a visible location.
3.4 Environmental Management System EnviroProbe 1000
Detecting environment temperature and humidity, the EnviroProbes are designed to work with the EnviroStation. You can cascade multiple EnviroProbes to extend the detecting range. To install the EnviroProbe(s), please see the following instructions.

**Step 1** Set the **Comm** DIP switch to **Station** on the EnviroProbe(s).

**Step 2** Make sure the last EnviroProbe in the chain (the farthest) is set to **Rt-Yes**, and the rest of the EnviroProbes are set to **Rt-No**. If only one EnviroProbe is connected, please also make sure that it is set to **Rt-Yes**.

![EnviroProbe comm switch diagram]

**Step 3** Set the ID DIP switch to assign an ID for each EnviroProbe (please refer to the EnviroProbe User Manual). No particular numeric order is required for the connected units; however, make sure that each EnviroProbe is assigned with a unique ID. Up to ten EnviroProbes can be cascaded.

![EnviroProbe ID switch diagram]

**Step 4** Attach the EnviroProbe(s) to rack cabinet doors or metal plates.

**Step 5** Use a standard CAT5 cable to connect the first (nearest) EnviroProbe’s **Input** to the **Delta-BUS** port on the rear panel.

**Step 6** Cascade other EnviroProbes using standard CAT5 cables. Connect the **Output** port to the next EnviroProbe’s **Input** port. Please see the figure below.

![EnviroProbe connection diagram]
WARNING:
Under no circumstance should you connect the EnviroProbe’s Input port to another one’s
Input port. This may cause unrecoverable malfunction to your EnviroProbes. Please be
careful and always make sure that you are connecting the correct ports before you plug
in.

3.5 Delta DPH Series 75kVA UPS
The DPH series UPS is a three-phase, four-wire online UPS designed for applications in large-scale
data centers, factories and other facilities. With its innovative IGBT (Insulated Gate Bipolar
Transistor) architecture, the UPS provides high quality, low noise, pure and uninterrupted power
supply.
Its modular and hot-swappable design provides a highly cost-effective solution to your power
requirements. The number of Power Modules installed in the UPS can be customized based on your
needs. As your power demands arise, you can easily increase system capacity by adding more
Power Modules to the UPS. This design also makes module maintenance quick, easy, and non-
interruptive to the operation of the system.
The Hot Standby Redundancy, Common Battery and ECO Modes can be used to enhance operation
efficiency and reliability. Its communication interfaces and smart slots allow remote system
monitoring and other extensive applications.
Please see Figure 3-3 for the Exterior & Dimensions of the DPH Series 75kVA UPS.

(Figure 3-3: DPH 75kVA UPS Exterior & Dimensions)
3.6 Delta Infrasuite RowCool Precision Cooling Unit

The Delta Infrasuite RowCool Precision Cooling Unit (Air-Cooled Type) based on a side-by-side cabinet design operates near a heat load to produce predictable cooling effects with high efficiency. Thanks to its scalable and mobile modular design, it is easy to reconfigure or add equipment to meet the ever-increasing cooling demands as your data center expands.

The air is sucked into the cabinet through the rear, and then the conditioned air is released through the front of the cabinet.

It is provided with a user-friendly interface to facilitate operation and management, a built-in central processing unit for active control of air conditioning efficiency, and an alarm system to warn against abnormal conditions so as to guarantee proper running of the system.

Please see Figure 3-4 for the Exterior & Dimensions of the Infrasuite RowCool Precision Cooling Unit.

(Figure 3-4: Exterior & Dimensions of Cooling Unit)
Chapter 4 : Wiring

4.1 Diagram of the POD

Please refer to below Figure 4-1 & Figure 4-2 for the wiring connection.

(Figure 4-1: Wiring Connection)
(Figure 4-2: Wiring Connection)
4.2 Wiring for Electric Door

Please refer to below *Figure 4-3* for the wiring of Electric Door.

(Figure 4-3: Wiring for Electric Door)

4.2.1 Terminal Block Wiring Table for the Front Door

For the terminal block wiring table of the front door, please refer to *Table 4-1*.

<table>
<thead>
<tr>
<th>Item</th>
<th>From</th>
<th>To</th>
<th>Current</th>
<th>Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminal 01</td>
<td>Front Door Infrared Detector V+</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>2</td>
<td>Terminal 02</td>
<td>Front Door Infrared Detector V-</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>3</td>
<td>Terminal 03</td>
<td>Front Door Infrared Detector NO</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>4</td>
<td>Terminal 04</td>
<td>Front Door Infrared Detector COM</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>5</td>
<td>Terminal 05</td>
<td>Front Door Fingerprint reader Terminal 03</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>6</td>
<td>Terminal 06</td>
<td>Front Door Fingerprint reader Terminal 04</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>7</td>
<td>Terminal 07</td>
<td>EMS2000 Relay Output 1 NO</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>8</td>
<td>Terminal 08</td>
<td>EMS2000 Relay Output 1 COM</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>9</td>
<td>Terminal 09</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>10</td>
<td>Terminal 10</td>
<td>PDC MODULE GATE 1 (+)</td>
<td>2A</td>
<td>3*0.75 mm²</td>
</tr>
<tr>
<td>11</td>
<td>Terminal 11</td>
<td>PDC MODULE GATE 1 (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Terminal 12</td>
<td>PDC MODULE GATE 1 (G)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Table 4-1: Terminal Block Wiring for the Front Door)
### 4.2.2 Terminal Block Wiring Table for the Rear Door

For the terminal block wiring table of the rear door, please refer to Table 4-2.

<table>
<thead>
<tr>
<th>Item</th>
<th>From</th>
<th>To</th>
<th>Current</th>
<th>Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminal 01</td>
<td>Rear Door Infrared Detector V+</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>2</td>
<td>Terminal 02</td>
<td>Rear Door Infrared Detector V-</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>3</td>
<td>Terminal 03</td>
<td>Rear Door Infrared Detector NO</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>4</td>
<td>Terminal 04</td>
<td>Rear Door Infrared Detector COM</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>5</td>
<td>Terminal 05</td>
<td>Rear Door Fingerprint reader Terminal 03</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>6</td>
<td>Terminal 06</td>
<td>Rear Door Fingerprint reader Terminal 04</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>7</td>
<td>Terminal 07</td>
<td>EMS2000 Relay Output 2 NO</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>8</td>
<td>Terminal 08</td>
<td>EMS2000 Relay Output 2 COM</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>9</td>
<td>Terminal 09</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>10</td>
<td>Terminal 10</td>
<td>PDC MODULE GATE 1 (+)</td>
<td>2A</td>
<td>3*0.75 mm²</td>
</tr>
<tr>
<td>11</td>
<td>Terminal 11</td>
<td>PDC MODULE GATE 1 (-)</td>
<td>2A</td>
<td>3*0.75 mm²</td>
</tr>
<tr>
<td>12</td>
<td>Terminal 12</td>
<td>PDC MODULE GATE 1 (G)</td>
<td>2A</td>
<td>3*0.75 mm²</td>
</tr>
</tbody>
</table>

*(Table 4-2: Terminal Block Wiring for the Rear Door)*
4.2.3 Wiring Diagram for the Front Door Fingerprint Card Reader

Please refer to below Figure 4-4 for the wiring of the front door fingerprint card reader.

(Figure 4-4: Wiring for Electric Door the Front Door Fingerprint Card Reader)

4.2.4 Wiring Table for the Front Door Fingerprint Card Reader

For the wiring table of the front door fingerprint card reader, please refer to Table 4-3.

<table>
<thead>
<tr>
<th>Item</th>
<th>From</th>
<th>To</th>
<th>Current</th>
<th>Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminal 01</td>
<td>PDC Module F18 FD +</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>2</td>
<td>Terminal 02</td>
<td>PDC Module F18 FD -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Terminal 03</td>
<td>Front Door Terminal 05</td>
<td></td>
<td>2A   2*0.75 mm²</td>
</tr>
<tr>
<td>4</td>
<td>Terminal 04</td>
<td>Front Door Terminal 06</td>
<td></td>
<td>2A   2*0.75 mm²</td>
</tr>
<tr>
<td>5</td>
<td>4PIN (Ethernet)</td>
<td>24-port Switch</td>
<td>NA</td>
<td>Ethernet Cable</td>
</tr>
</tbody>
</table>

(Table 4-3: Wiring Table for the Front Door Fingerprint Card Reader)
### 4.2.5 Wiring Table for the Rear Door Fingerprint Card Reader

For the wiring table of the rear door fingerprint card reader, please refer to *Table 4-4*.

<table>
<thead>
<tr>
<th>Item</th>
<th>From</th>
<th>To</th>
<th>Current</th>
<th>Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminal 01</td>
<td>PDC Module F18 BD +</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>2</td>
<td>Terminal 02</td>
<td>PDC Module F18 BD -</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>3</td>
<td>Terminal 03</td>
<td>Rear Door Terminal 05</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>4</td>
<td>Terminal 04</td>
<td>Rear Door Terminal 06</td>
<td>2A</td>
<td>2*0.75 mm²</td>
</tr>
<tr>
<td>5</td>
<td>4PIN (Ethemet)</td>
<td>24-port Switch</td>
<td>NA</td>
<td>Ethernet Cable</td>
</tr>
</tbody>
</table>

*(Table 4-4: Wiring Table for the Rear Door Fingerprint Card Reader)*
Appendix 1 : Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship within the warranty period. If the product has any failure problem within the warranty period, Seller will repair or replace the product at its sole discretion according to the failure situation.

This warranty does not apply to normal wear or to damage resulting from improper installation, operation, usage, maintenance or irresistible force (i.e. war, fire, natural disaster, etc.), and this warranty also expressly excludes all incidental and consequential damages.

Maintenance service for a fee is provided for any damage out of the warranty period. If any maintenance is required, please directly contact the supplier or Seller.

WARNING:
The individual user should take care to determine prior to use whether the environment and the load characteristic are suitable, adequate or safe for the installation and the usage of this product. The User Manual must be carefully followed. Seller makes no representation or warranty as to the suitability or fitness of this product for any specific application.
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