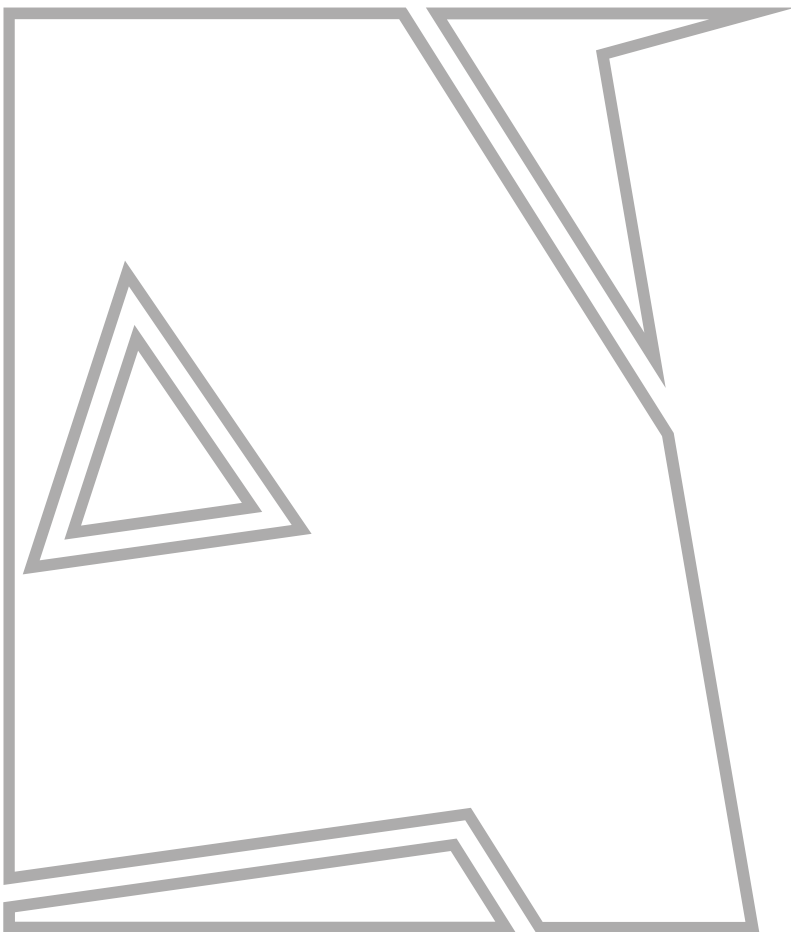




Quick Installation Guide

AR-50 Series

Modular Data Center



1 Overview

The whole system and components of the ARIET AR-50 s integrated data center product are shown in Figures 1-1 and 1-2.

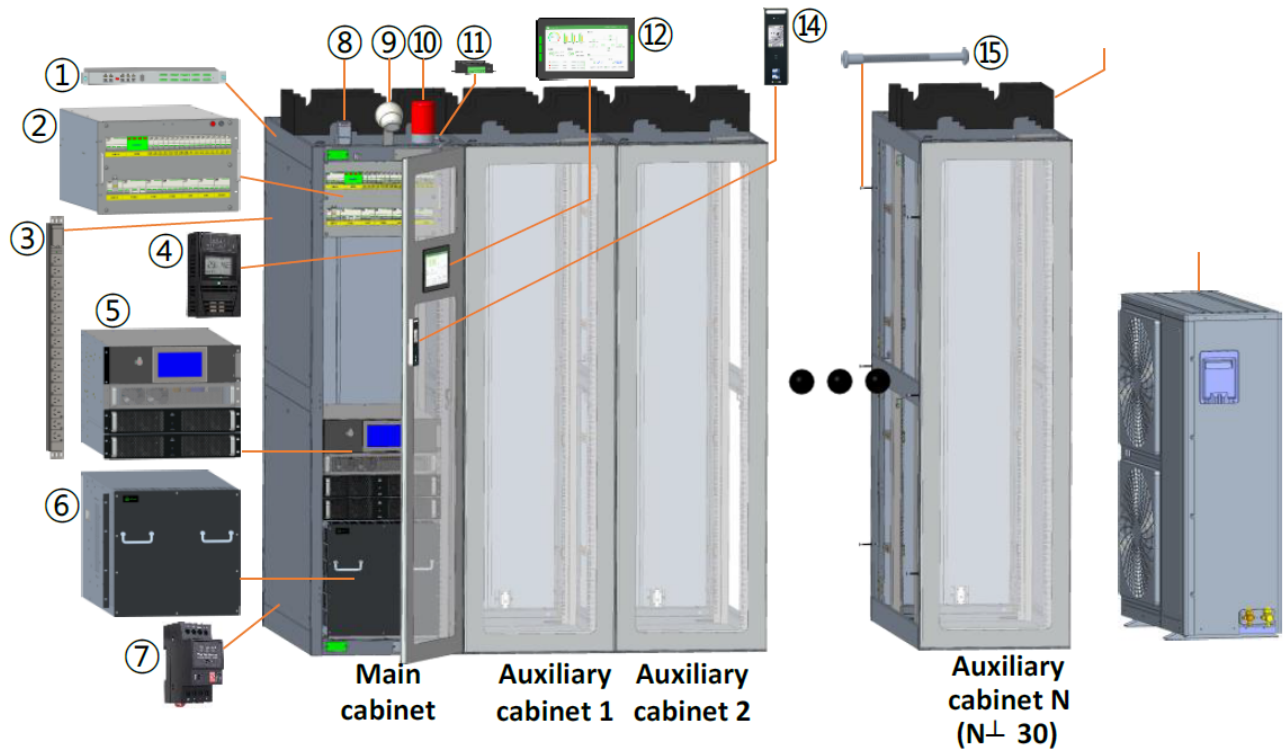


Figure 1-1 AR-50 system and components (the precision cooling is a rack precision cooling)

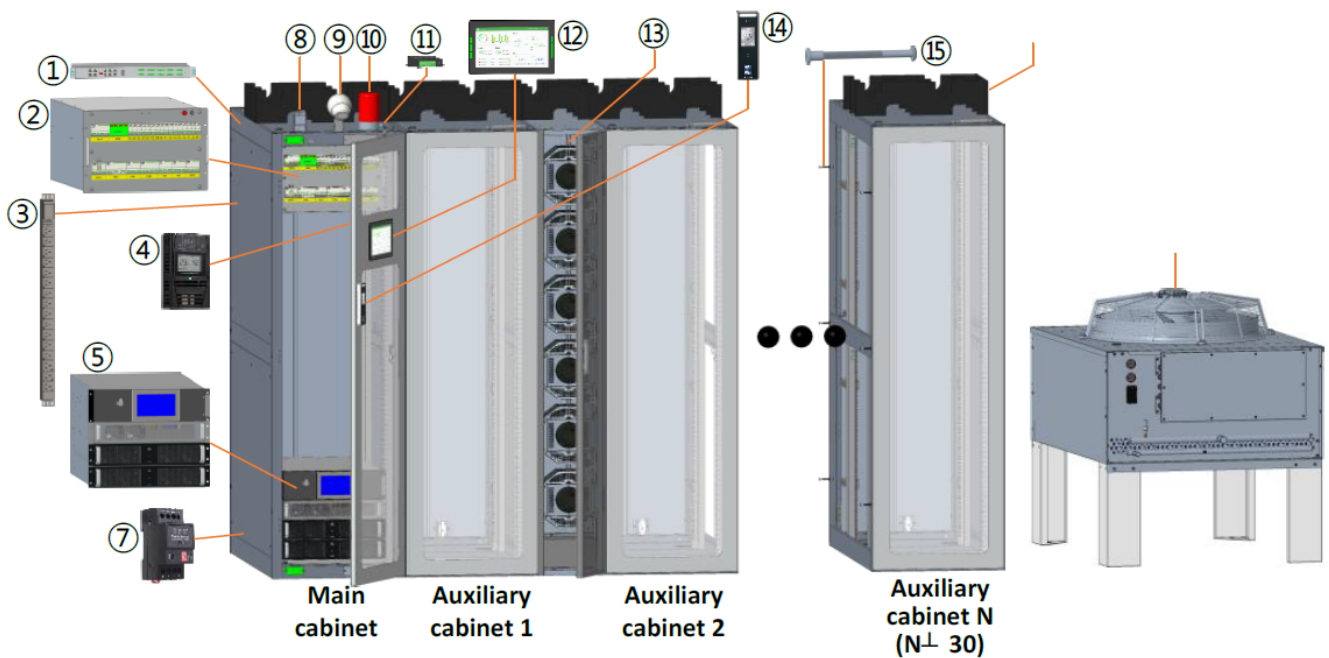


Figure 1-2 AR-50 system and components (row-to-row precision cooling)

- ① Single cabinet function module (1 + N) ; ② Power distribution module; ③ PDU; ④ Temperature and humidity sensor ; ⑤ UPS; ⑥ Split rack type precision cooling indoor unit ; ⑦ Water immersion sensor ; ⑧ Infrared detector; ⑨ Network camera; ⑩ Sound and light alarm; ⑪ Telephone voice and SMS alarm; ⑫ 10.1- inch function screen; ⑬ Indoor unit of row precision cooling ; ⑭ Integrated access control machine; ⑮ Cabinet screws; ⑯ Wire management trough ; ⑰ Split rack precision cooling outdoor unit; ⑱ Row precision cooling outdoor unit.

Optional accessories list:

Standard Equipment	10.1- inch function screen	Single cabinet function module	Access control machine	Mood lighting	IC card*5
	Cabinet screws*6				
Optional Equipment	Power distribution module	UPS	Precision cooling indoor unit	Precision cooling outdoor unit	Water sensor
	Temperature and humidity sensor	Battery Module	Battery Cabinet	Sound and light alarm	Infrared detector
	Phone voice SMS alarm	Webcam	IC Card	PDU	Blind Plate
	guide	tray	Floating nut	-	-

2 Installation

Refer to the installation guide for installation.

2.1 Installing the cabinet components

Remove packaging and pallets;

Move the cabinets to the desired location as shown in Figure 1-1 or 1-2 , and use cabinet screws to secure adjacent cabinets.



Figure 2-1 Cabinet Unpacking

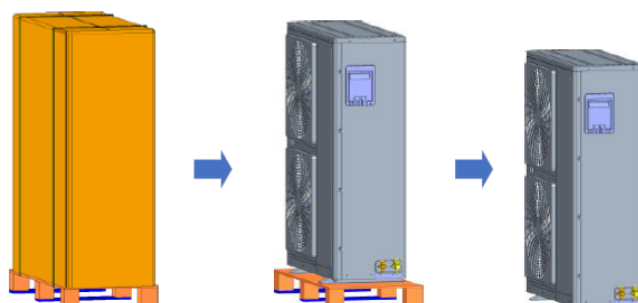


Figure 2-2 Rack precision cooling-outdoor unit unpacking

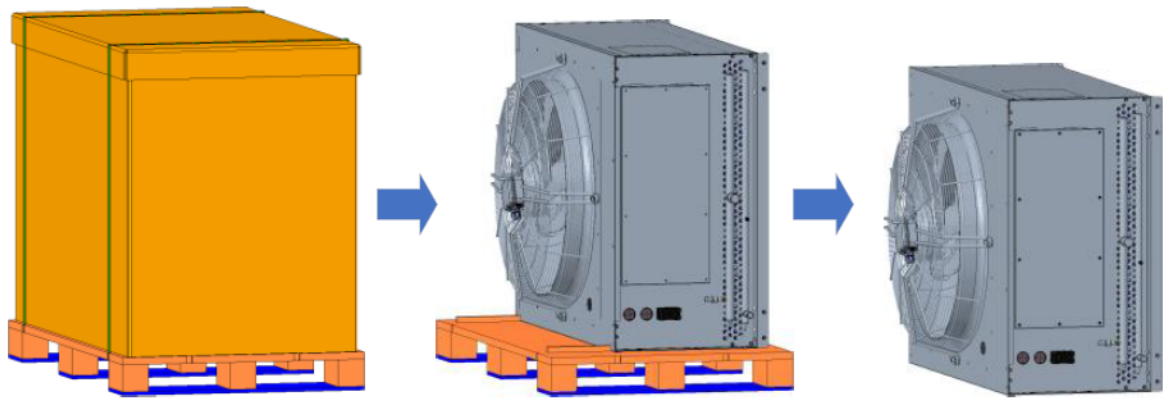


Figure 2-3 In-row precision cooling-outdoor unit unpacking

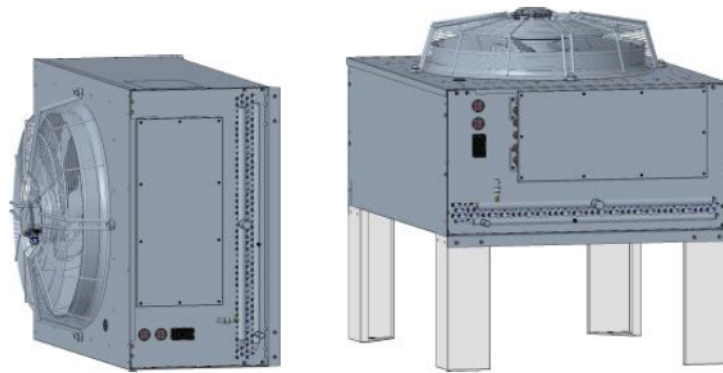


Figure 2-4 Two installation methods for the outdoor unit of the In-row precision cooling

2.2 Install air conditioning components

The customer installs the precision cooling outdoor unit and air conditioning pipes on site. The installation method is conventional installation. Determine the installation position of the outdoor unit on site and place the outdoor unit on a base (or tripod). The distance requirements between the air inlet and outlet sides of the outdoor unit and obstructions such as walls are shown in Figure 2-5.

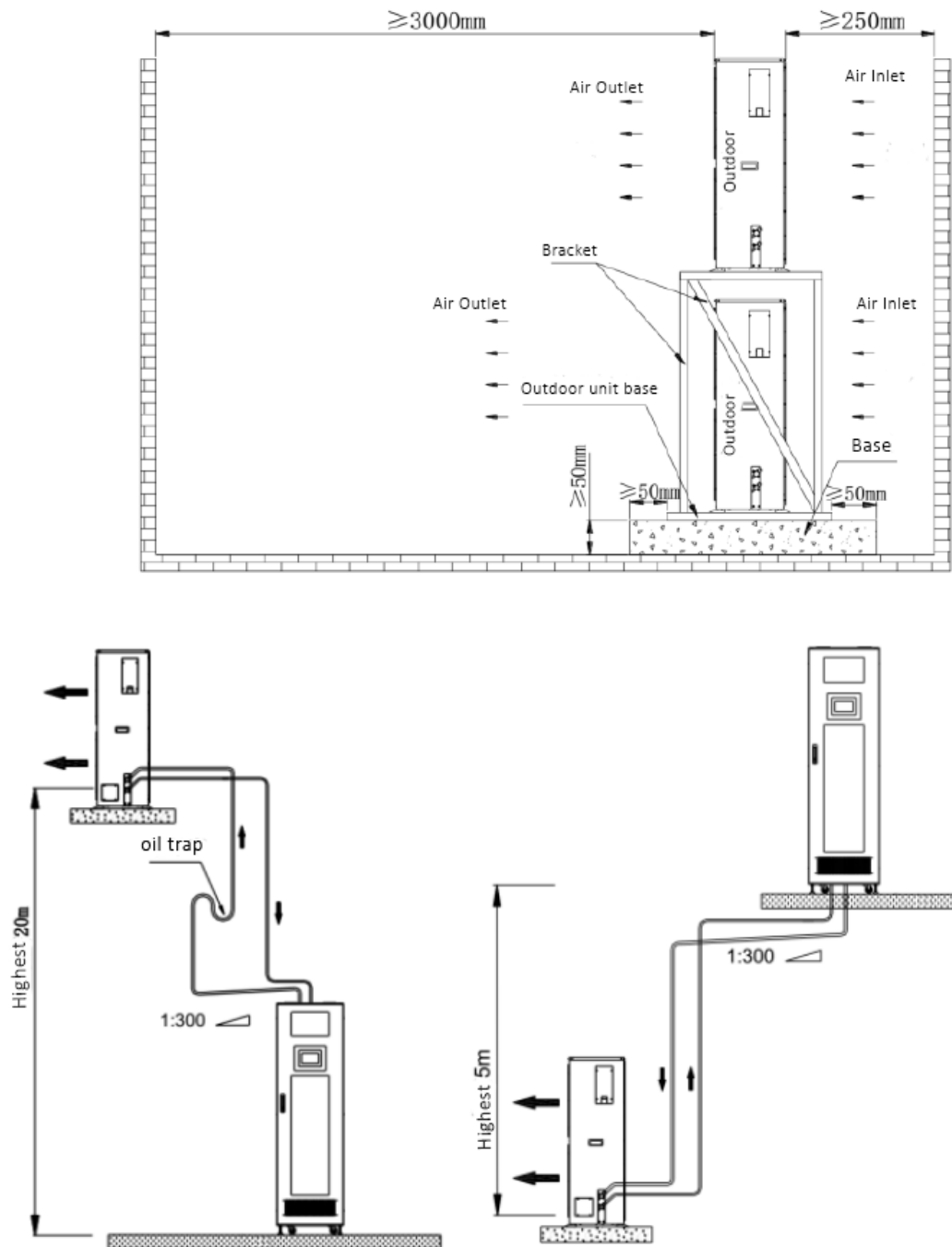


Figure 2-5 precision cooling outdoor unit installation requirements

Positive height installation requirements

Negative height installation requirements

- 1) Fix the outdoor unit to the base with expansion bolts;
- 2) Connecting copper pipes. The copper pipes connecting the indoor and outdoor units are delivered together with the cabinet and need to be installed on site. The industry standards must be followed to select and lay pipes, evacuate the system and charge refrigerant (only when refrigerant needs to be added due to the long pipe length);
- 3) The maximum length of the pipeline shall not exceed 30 meters.

2.3 Connecting cables

Internal signal and control connections of the AR-50series modular data center cabinet are basically pre-install. Customers only need to connect the AC power to the input port of the power distribution module, connect the air-conditioning indoor unit , air-conditioning outdoor unit, PDU and parallel cables to start the machine for use.

2.3.1 Connect the system main input cable

Connect the main input cable as shown in Figure 2-6.

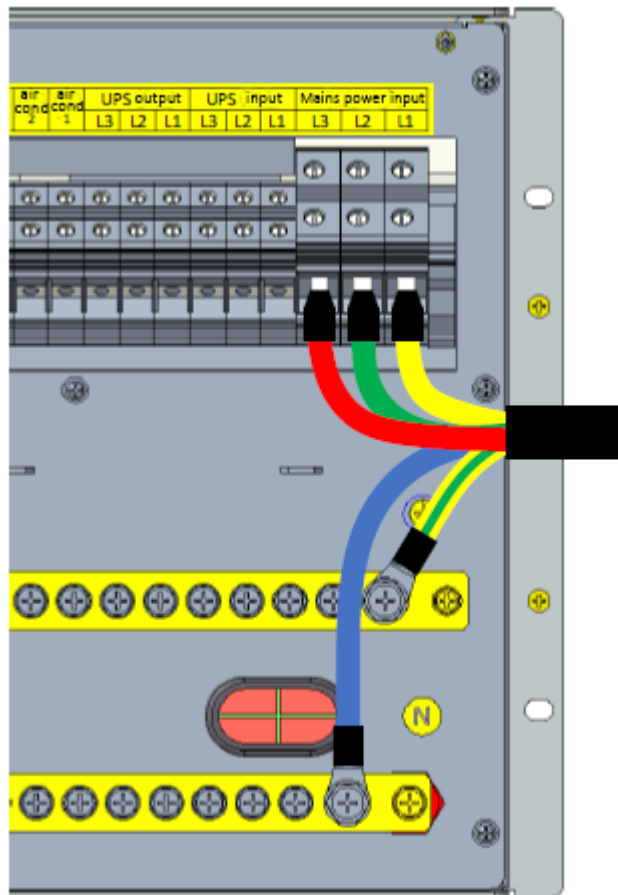


Figure 2-6 Main input cable wiring

2.3.2 Cables connecting precision coolings and PDU

Connect the cables of the precision cooling indoor and outdoor units according to Figure 2-7 and Figure 2-8 .

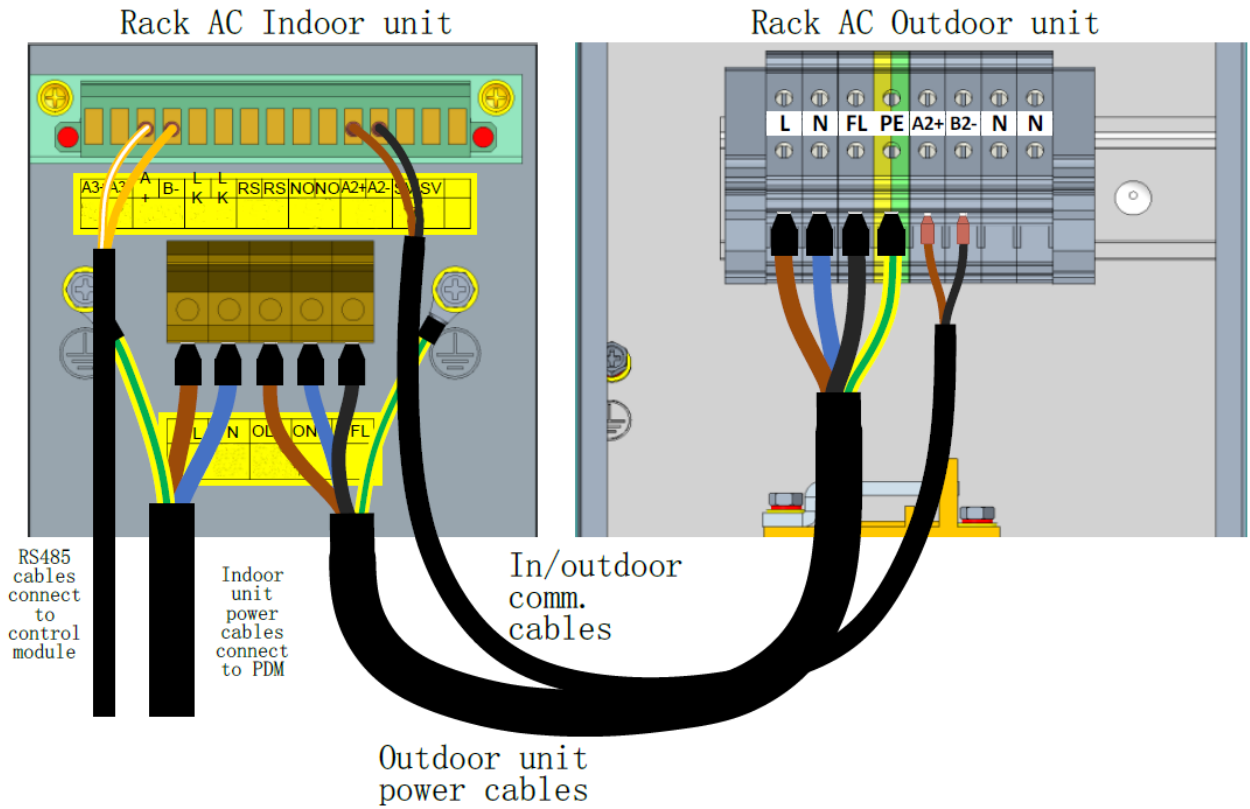


Figure 2-7

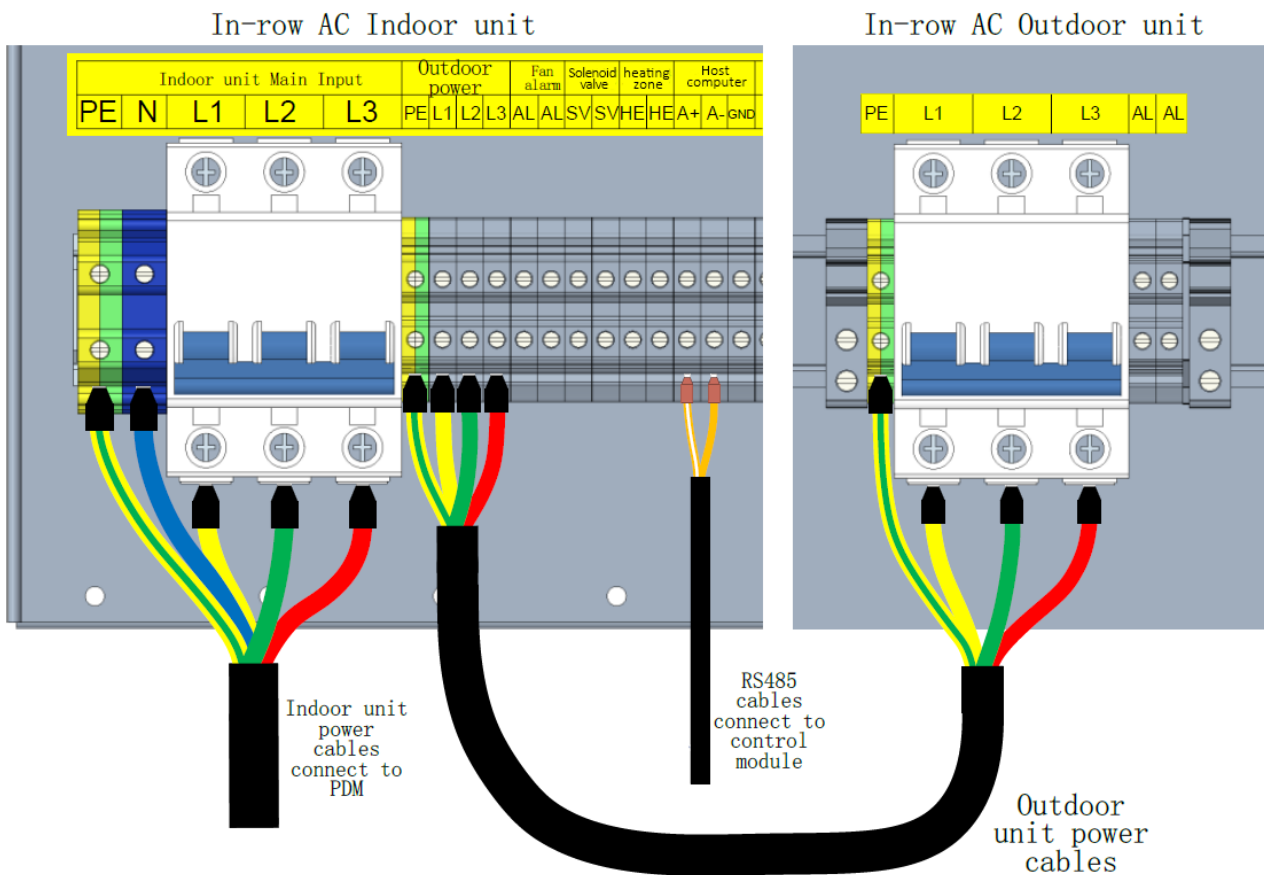


Figure 2-8

Confirming that the power cables on the PDU are properly connected, connect the PDU power cables and precision cooling power cables to the power distribution module according to Figure 2-9.

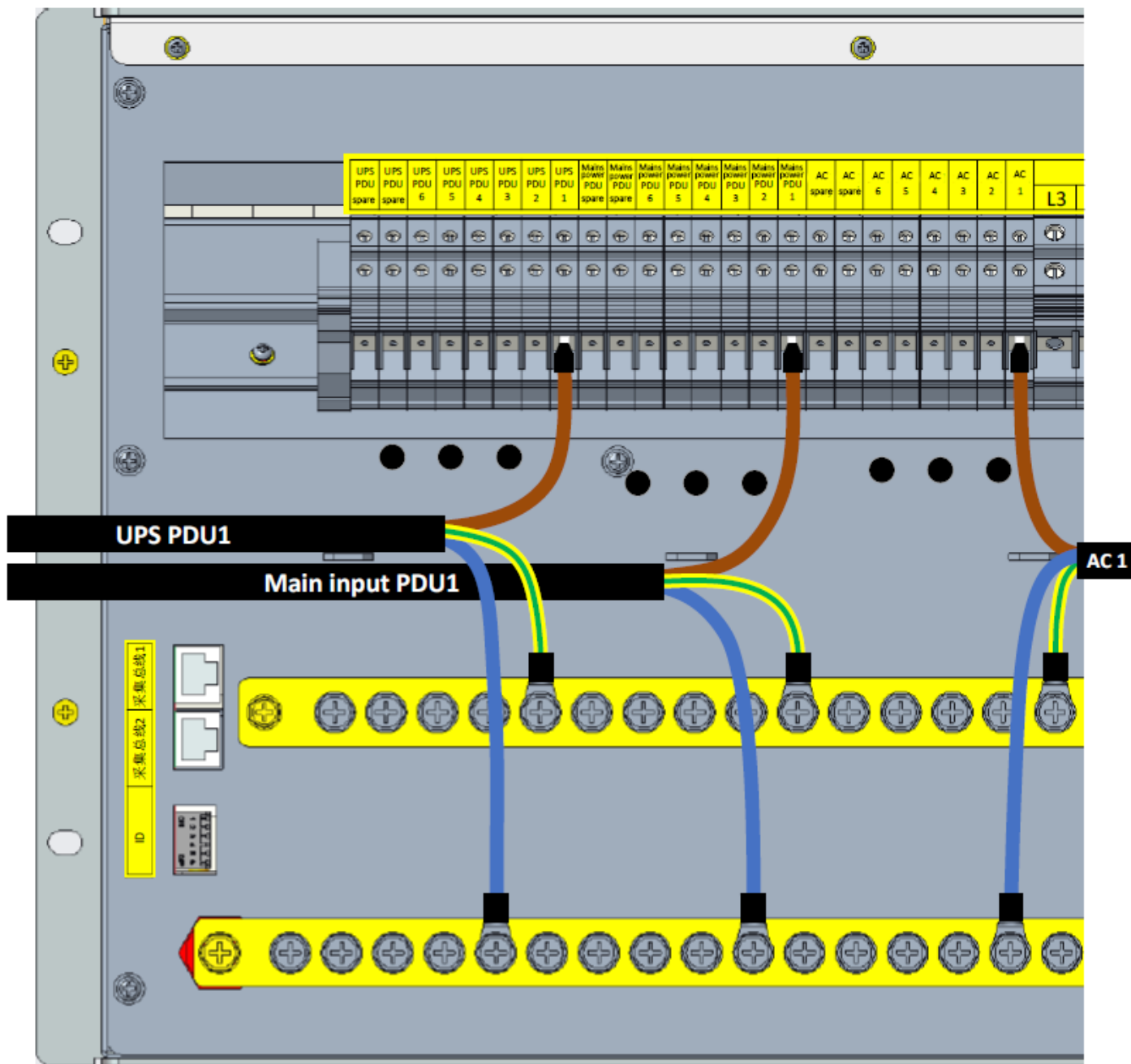


Figure 2-9 Wiring on the rear panel of the power distribution module

2.3.3 Connecting the parallel cable

According to Figure 2-10, use parallel cables to connect the control modules of each cabinet. At the same time, set the ID addresses in sequence according to the actual number of cabinets: 1, 2, 3, ..., N+1.

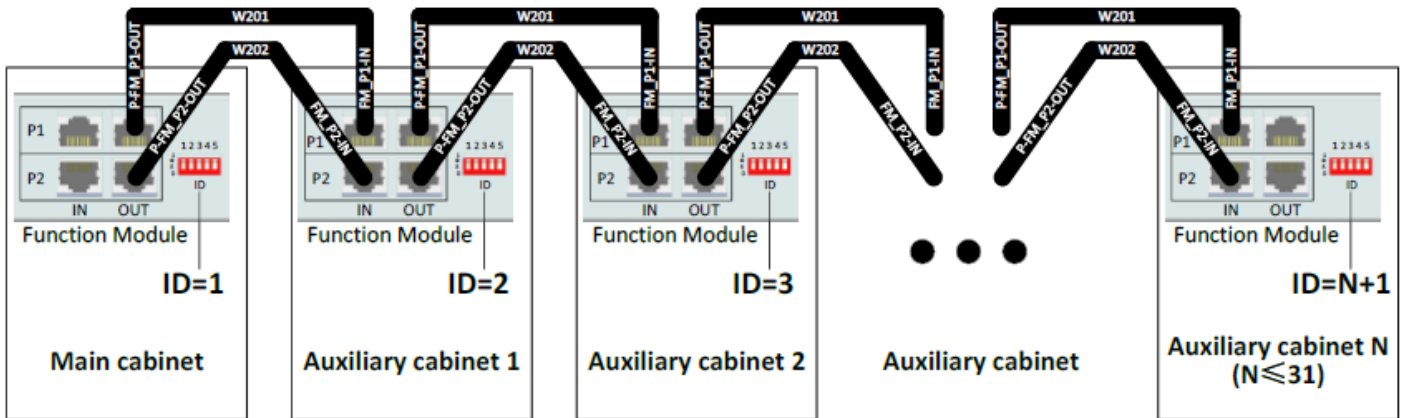


Figure 2-10 Parallel wiring and setting ID address

3. Power-on operation

After the system is installed and the ID address is set according to step 2.3.3, you can start the system. First, turn on the power switches of all single cabinet control modules as shown in the Figure 3-1 :

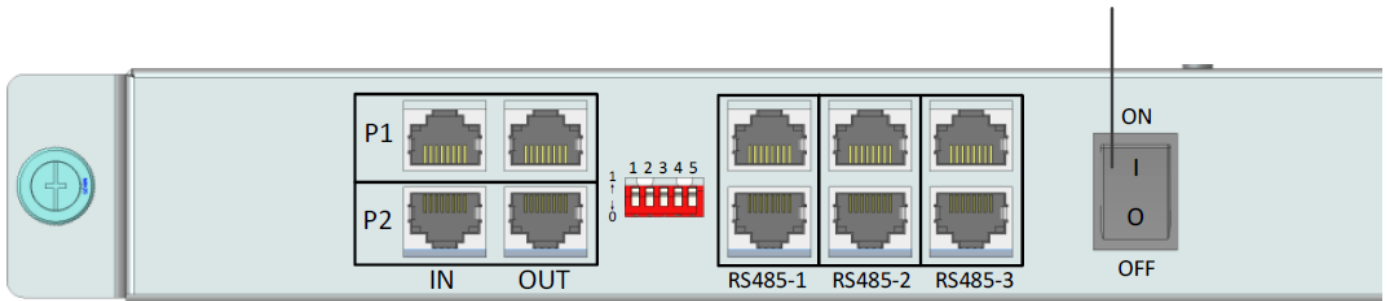


Figure 3-1 Front panel of a single cabinet control module

After the system power is turned on, the display on the front door of the main cabinet will automatically turn on and enter the home page of the dynamic environment monitoring system. The system startup must be completed by trained authorized professional technicians, and it is recommended to be performed by personnel from the Customer Service Center.