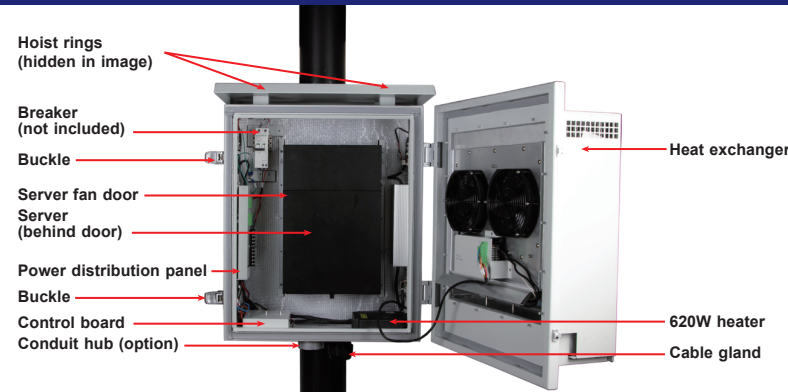


SUPERMICR[®] SuperServer E403-IP Series Quick Reference Guide

IP65 Enclosure Features

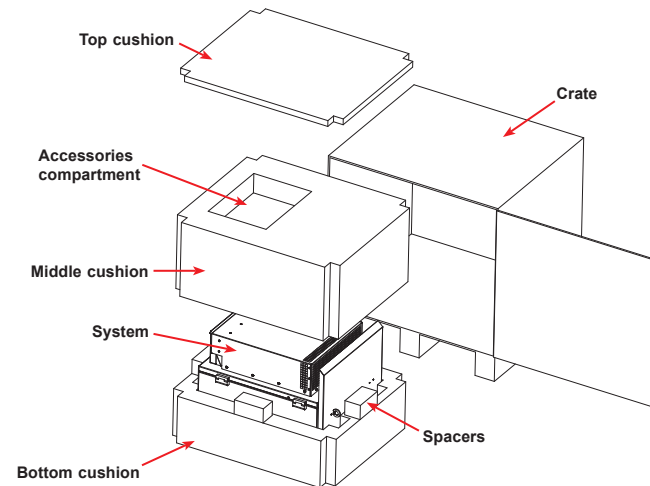


Item	Features	Description
1	Hoist Rings	Ring bolts for lifting the system when mounting
2	Server	Server E403 series
3	Control Board	Internal environmental control
4	Power Distribution Panel	Power inlet and supply to devices
5	Heat Exchanger	Power inlet and supply to devices
6	Conduit Hub	1.5" conduit hub for cable inlet/outlet (optional)
7	Buckle	Used to open and hold shut the CSE-RACK2U-IP65 enclosure
8	Cable Gland	Secures the end of the electrical cable
9	Heater	Heater to keep the server at operating temperature

Unpacking and Installation

CAUTION: A minimum of two individuals are required to handle the system.

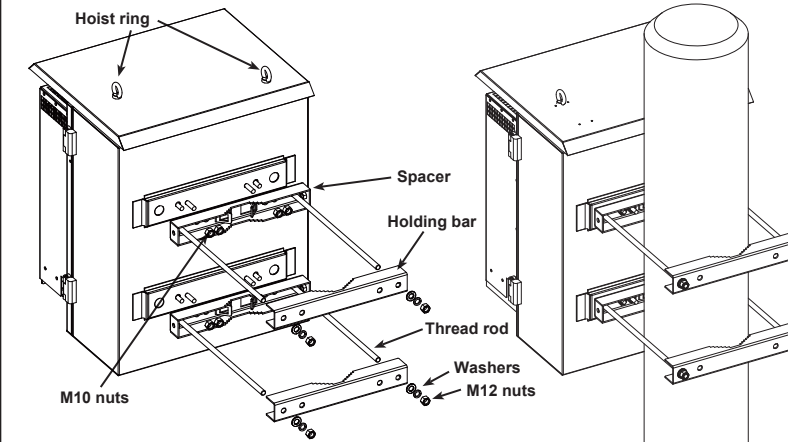
1. Remove the system from the wooden crate.
2. Remove the top cushion.
3. Remove the accessories from the top of the middle cushion.
4. Remove middle cushion.
5. Remove the four spacers.
6. Lift out the system (perform with at least two individuals).



Mounting

The suggested mounting method is described below. Before you begin, mark the desired height of the system on the pole when installed.

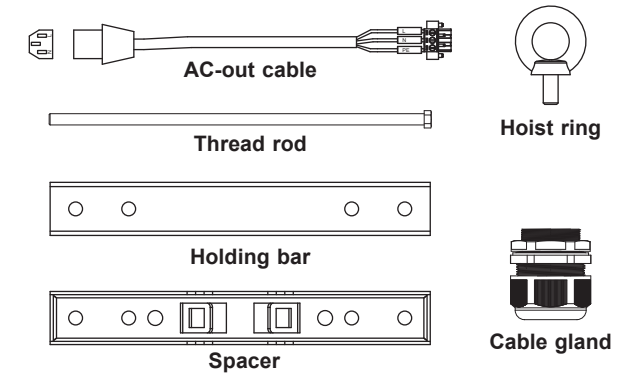
1. Assemble the two spacers (tighten with M10 screws) and four thread rods to the system. (Use caution with the four thread rods to avoid injury.)
2. Install the two hoist rings to the top of the enclosure, making sure they are securely fastened.
3. Raise the system with the two hoist rings to the designated altitude. (Avoid scratching or damaging to surface paint.)
4. Push the system firmly against the pole.
5. Fasten the system on the pole using the provided two holding bars and tighten them with four M12 screws and eight washers (both flat and spring washers).
6. Make sure the system is mounted firmly on the pole before releasing the hoist hooks/ropes.



Pole Mounting Requirements

Manpower: Three people

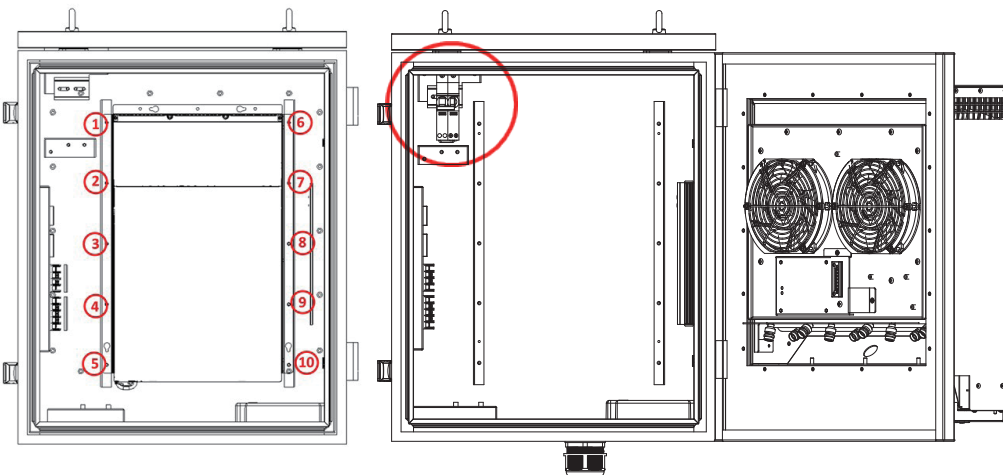
- Tools: Adjustable wrench with diameter 1.3 (32mm)
Phillips #1 and #2 screwdrivers
One breaker that can support 1200W power, with leakage and surge protection and GFCI. (DIN rail mount)
Measuring tape
Surge protection devices (SPD), DIN rail mount
Shielded dual-conductor cable (16 AWG)
Grounding wire (6 AWG)
Marking pen



Cabling Installation

CAUTION: Breaker and SPD are not included with the system and will need to be purchased separately. Please select products which comply with local regulations.

1. Unlock and release the buckles.
2. After ensuring there is ample swing space and no obstructions, open the system door.
3. Unplug the power cord and dismount the server from the cabinet by removing 10 M3 screws on the mounting brackets
4. Carefully remove the server from the cabinet
5. Install the breaker and the SPD at the designated location (at upper left corner), connect the cables from the enclosure to the breaker and from the breaker to the SPD.
6. Make sure the breaker is in the off position.
7. Remove the plastic cover of the AC input terminal on the power distribution panel, connect the AC power input cable to the terminal and make sure it is fastened properly and then replace the plastic cover.
8. Replace the server in the cabinet and fasten it by reversing steps 3 and 4.
9. Connect all cabling to and from the server.
10. Organize the cables, run them through the cable gland, and then tighten the cable gland.
11. Connect the other end of the AC input cable to the facility power panel (connect system side first and then facility power supply side).
12. Switch on the main (facility) power first and then the breaker to start the system.
13. Check the status LEDs on the power distribution panel and the heat exchanger control box make sure they indicate normal operation as noted in the table of Information LEDs.
14. Close the enclosure door and lock it.



System Warning and Caution

Warnings

- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes, standards and national wiring regulations.
- Use this unit only in the manner intended by the manufacturer. If you have questions, please contact the manufacturer.
- Install the system in accordance with the instructions in this installation manual. Improper installation may result in electric shocks or fire.
- Make sure that all wiring is secured, the specified wires are used, and there is no strain on the terminal connections or wires.
- Before servicing or cleaning the unit, switch power off and disconnect the power supply.
- Be sure to use only the specified accessories and parts for installation work.
- The system shall be not accessible to the general public.

Caution

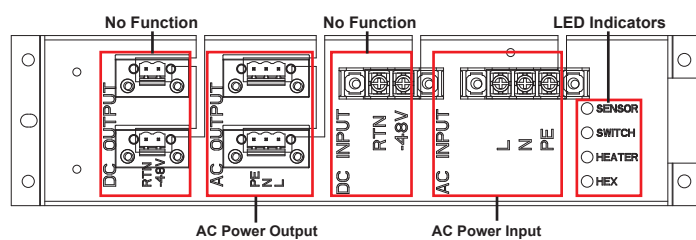
- Do not place any objects on/in the system.
- Do not block air inlets or outlets.
- Do not install the system at any place where there is a danger or flammable gas leakage..
- Do not touch the air inlets, outlets, or aluminum fins of the unit.
- Be aware of any potential risks when installing, inspecting, maintaining, or repairing the system.
- Do not topple the system while in transport or storage.
- Please keep children away from the system.

Precaution

- Only install the system on a pole with a diameter of between 5" and 10".
- Ensure that the pole is capable to withstand the weight of the system before installation.
- Various pole types and materials are regulated in different regions, please refer to local regulations before mounting the system on a pole.
- Keep a 4ft (122cm) clearance around the pole to provide operating space.
- Use only the designed components and fasteners; using alternative components will invoke unpredictable risk. When not servicing, always keep all covers/panels/door on the server closed. These must be in place to allow for proper airflow and to prevent overheating.
- If surface paint becomes scratched or chipped off, touch it up with outdoor-use paint.

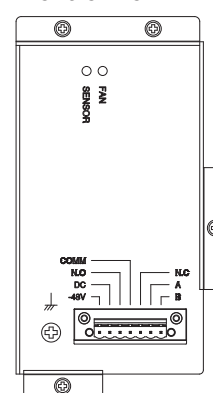
Power Distribution Panel and Information LEDs

Power Distribution Panel



AC Power Input Specifications				AC Output Specifications (Server Power)			
Pin	Description	Range	Note	Pin	Description	Range	Note
L	AC Live	110/220VAC	11A/5.5A max.	L	AC Live	110/220VAC	6.5A/3.2A max.
N	AC Neutral			N	AC Neutral		
PE	Protective Earthing			PE	Protective Earthing		

Heat Exchanger Control Box



LED	Location	Status			Description
		On	Off	Flashing	
Sensor	A	Green	Dark		Server is powered on
				Green	Enclosure temperature is normal
				Red	Enclosure temperature is below 0°C or above 65°C
Switch	A	Green	Dark		Server is powered on
				Red	Power to server cannot be cut off
				Dark	Heater is off
Heater	A	Green			Heater is on
				Red	Heater cannot be turned off
				Dark	Heat exchanger is off or not responding
HEX	A		Green		Heat exchanger is operating normally
				Green	Control board is frozen
				Red	No communication between the thermal control board and the heat exchanger
Fan	B		Dark		Fans are powered off
			Green		Heat exchanger initiating
			Red		Fans are operating normally
Sensor	B			Dark	Fan failure
			Green		Heat exchanger is powered off
			Red		Heat exchanger initiating
		Green		Heat exchanger is operating normally	
		Red		Temperature sensor in the heat exchanger has failed	

Location A: Power distribution panel
Location B: Heat exchanger control box

Accessory Package Items

Item	Description	Quantity	Item	Description	Quantity
1	Spacer	2	8	Cable gland	1
2	Holding bar	2	9	Hoist ring	2
3	Thread rod	4	10	Door key	2
4	M12 nut	4	11	AC out cable	2
5	Washer	4			
6	Spring washer	4			
7	M10 nut	8			

Caution

SAFETY INFORMATION

IMPORTANT: See installation instructions and safety warning before connecting system to power supply.
http://www.supermicro.com/about/policies/safety_information.cfm

WARNING:

To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets.
If any CPU socket empty, install protective plastic CPU cap.

WARNING:

Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

Please read system warning before Installation

For more information go to: <http://www.supermicro.com/support>

