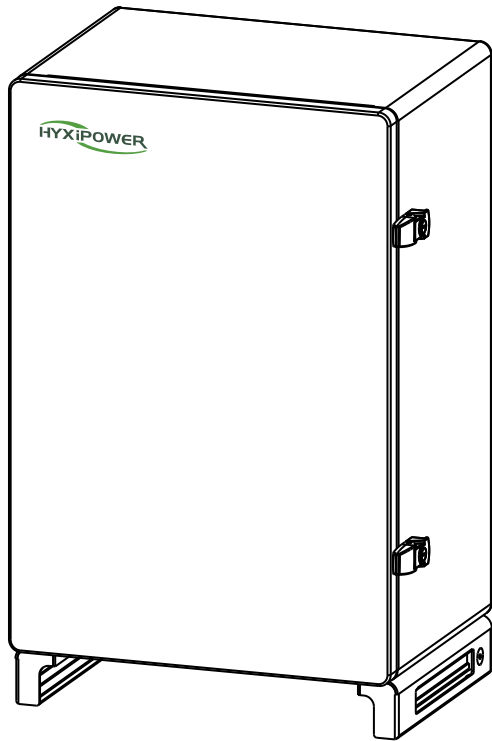


HYX-ECS



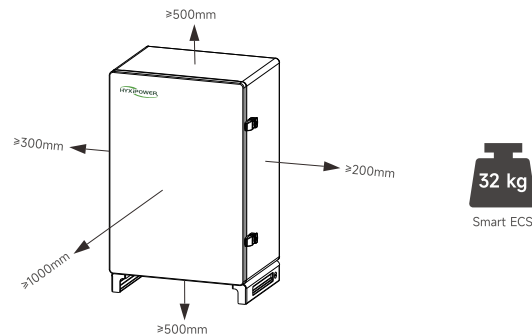
Safety Disclaimer

⚠ Notice

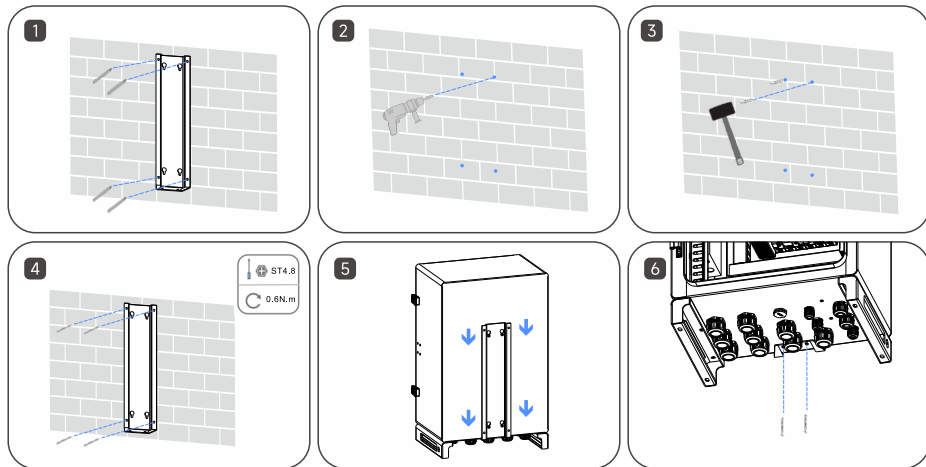
Before installation, please carefully read the user manual and quick installation guide to understand detailed product information and safety precautions. Damage to the equipment caused by improper storage, handling, installation, wiring, or use that does not follow the guidelines in this document and the user manual is not covered under the equipment warranty.

1 Mechanical Installation

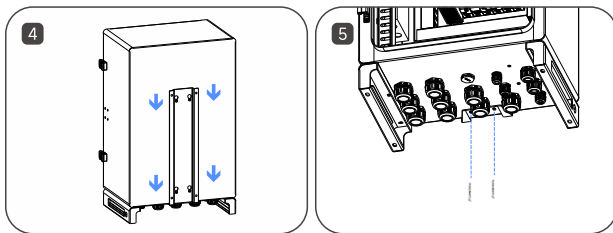
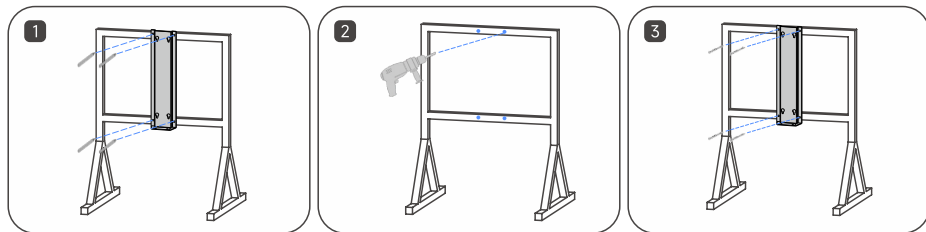
1.1 Installation Location



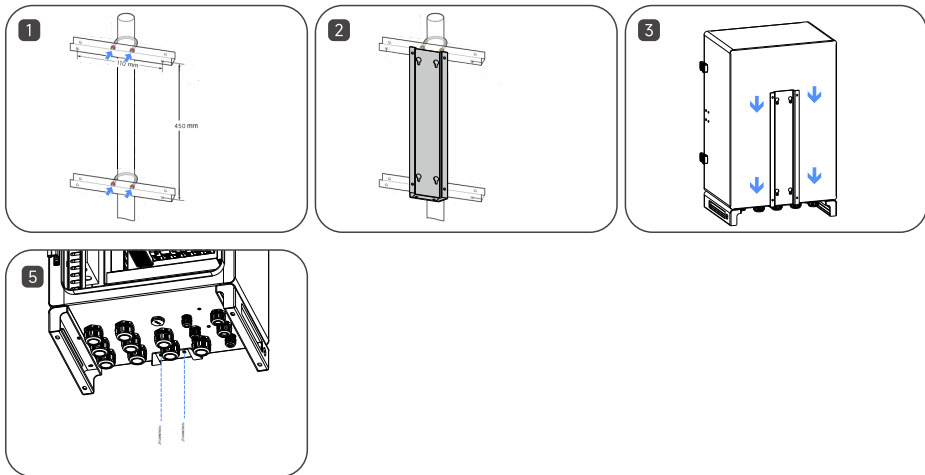
1.2 Wall-Mounted Installation



1.3 Bracket Installation

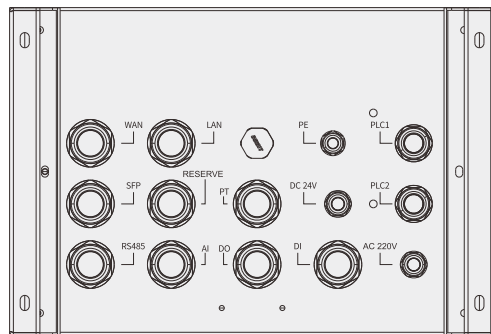


1.4 Clamp Installation



2 Electrical wiring

2.1 Interface Description

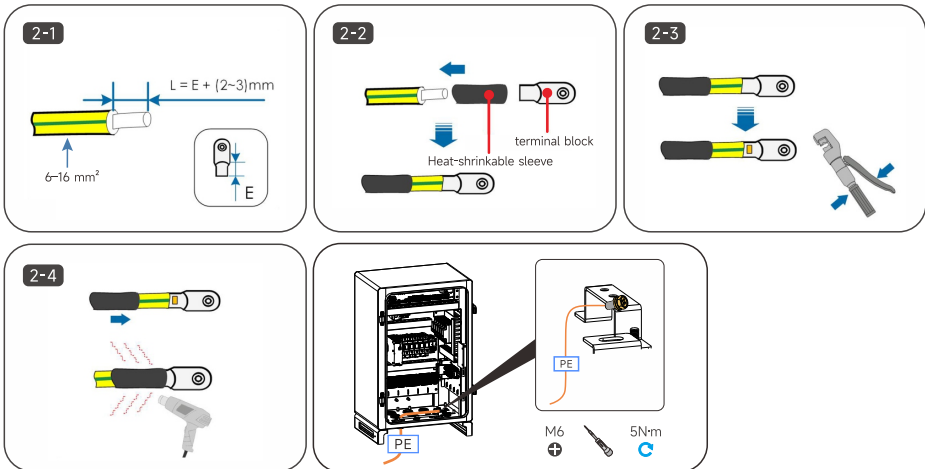


Interface	Explain
WAN	Ethernet port
LAN	Local device connection
PE	Grounding cable
PLC1	Power line communication 1
PLC2	Power line communication 2

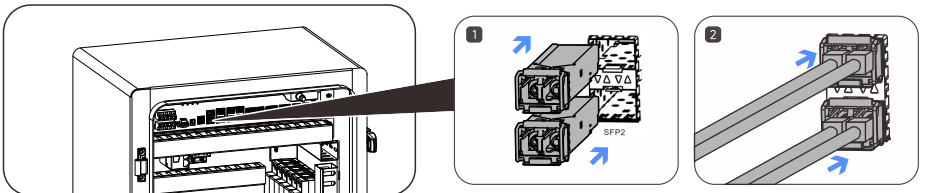
Interface	Explain
DC24V	24V DC input power supply
PT	PT Temperature Sensor
RESERVE	RESERVE
SFP	Fiber optic network port
RS485	RS485 communication
AI	AI Environmental tester
DO	DO Signal line
DI	DI Signal line
AC220V	AC 220V power supply

2.2 Connect the Cabinet Grounding Wire

Outdoor copper-core cable and OT-M6 terminal, cable cross-sectional area: 6-16mm².

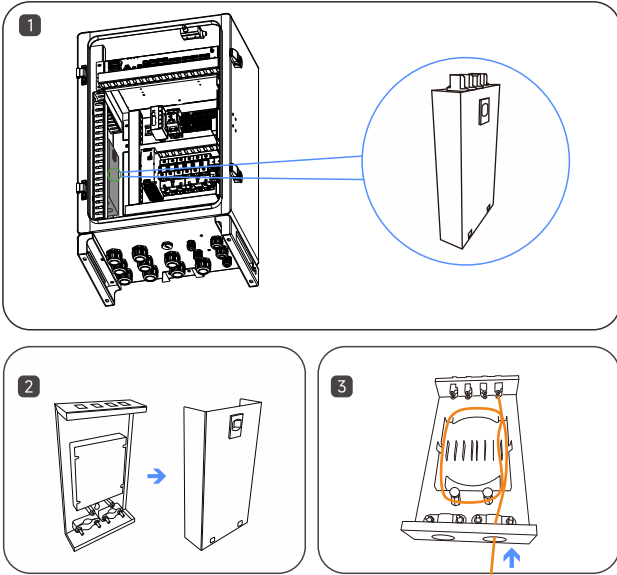


2.3 Connect the Fiber Optic Communication Cable



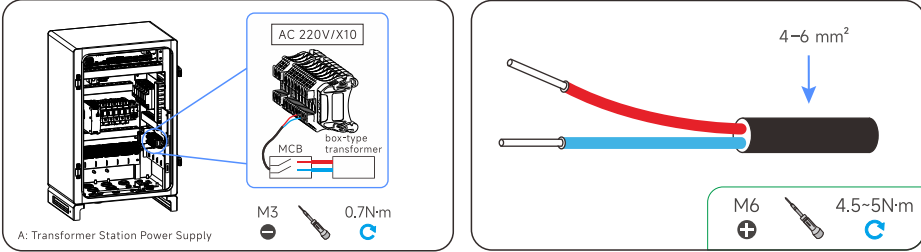
2.4 Connect the Fiber Optic Terminal Box

Open the fiber optic terminal box sequentially according to the diagram. Coil the fiber optic cable to the appropriate length, perform fiber splicing and wiring, and establish fiber optic network communication. After wiring is completed, close the fiber splicing cover plate sequentially to complete the fiber splicing and wiring.



2.5 Connect the Single-Phase Power Supply Line

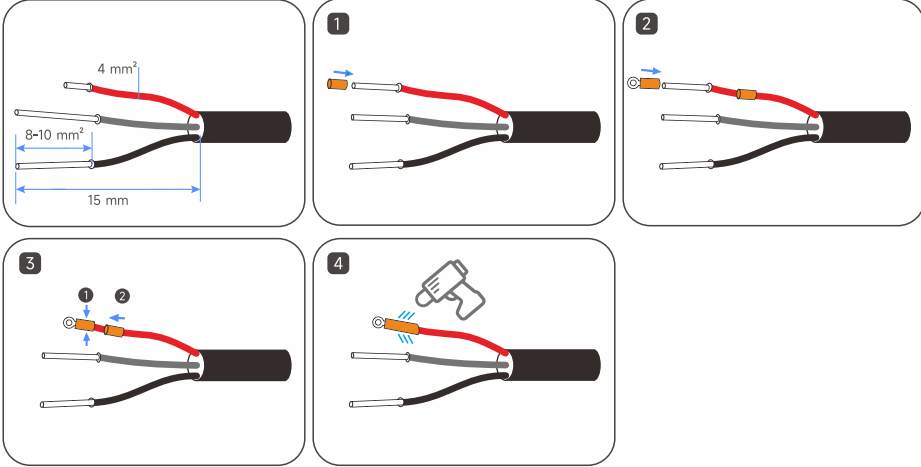
Wiring requirements: Two-core outdoor armored copper-core cable (standard) or single-core outdoor copper-core cable (through conduit), with working voltage ≥ 300V, cable cross-sectional area: 4-6mm², wiring location: as shown in diagram X10.



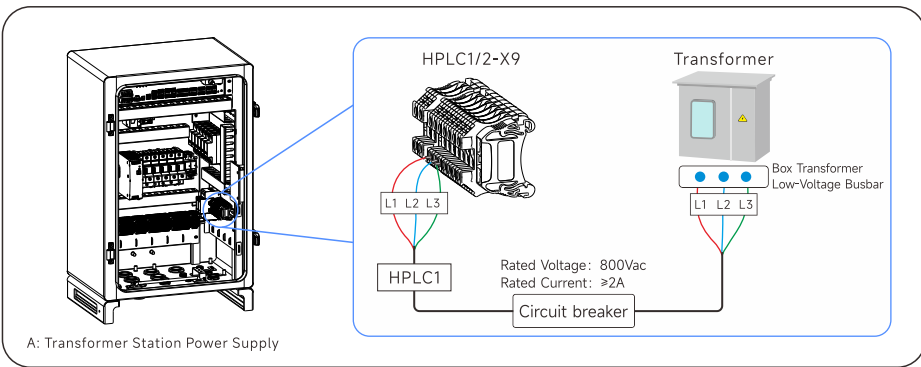
2.6 HPLC Port Wiring

Three-core outdoor armored copper-core cable
Working voltage to ground: ≥600V (for box transformer low-voltage AC rated voltage ≤500V) or ≥1000V (for 500V < box transformer low-voltage AC rated voltage ≤800V). Cable cross-sectional area: 6-10mm², wiring location: X9.

Strip the wire:

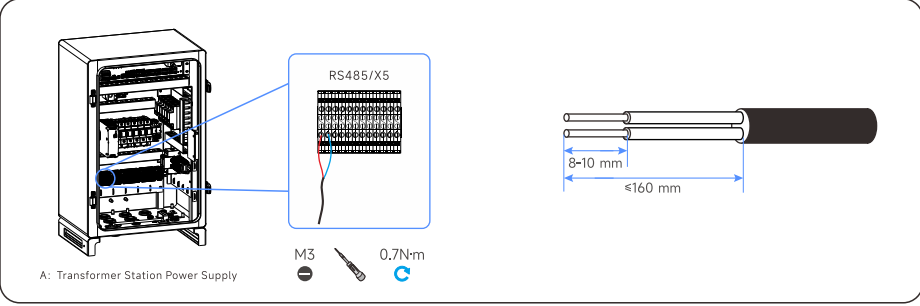


Wiring:



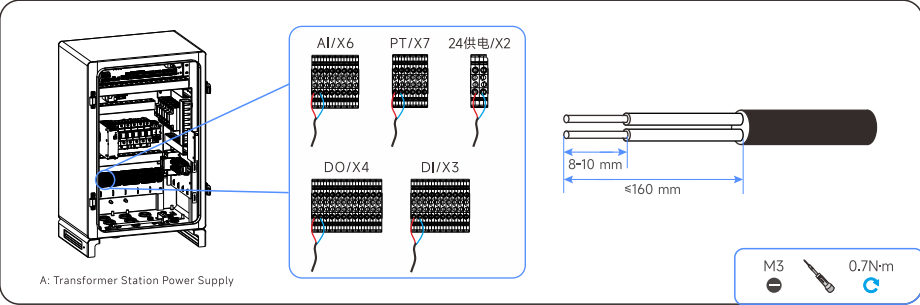
2.7 Connect the RS485 Cable

Outdoor-use computer cable (D.JYP2VP2-222×1) or aluminum shielded twisted pair, and OT-M4 terminal, cable cross-sectional area: 1.5-2.5mm², wiring location: X5.



2.8 Connect the DI/DO/AI/PT Cables

Recommended cables:
Outdoor-use computer cable (DIRJ2PV2-22×2×1) or aluminum shielded twisted pair, cable cross-sectional area: 1.5-2.5mm².
Wiring locations: AI wiring: X6; PT wiring: X7; 24V power supply: X2; DO: X4; DI: X3.



3 Trial run

3.1 Power-On Check

- The cabinet and all components are properly installed.
- All front switches on the cabinet and all internal switches are in the off position.
- All cables are connected correctly and securely, with no exposed metal. The cables are neatly tied, with consistent spacing, proper tightness, and uniform direction, and the cut ends are smooth with no sharp edges. There are no excess tape, cable ties, or other remnants on the cables.
- The routing of the power and signal cables meets the requirements for strong and weak current cable routing and complies with the system's wiring plan.
- All used waterproof connectors at the bottom of the cabinet are tightly screwed with lock caps, or the conduit is securely fastened to the cabinet. All used waterproof connectors or conduits are sealed with sealing compound. Unused waterproof connectors at the bottom of the cabinet are fitted with plugs and the lock caps are tightened.
- Check that the USB ports are tightly secured with protective covers and that the USB cables inside the cabinet are not loose.
- The interior of the cabinet is clean and tidy, with no dust, dirt, or construction debris.
- The cabinet's exterior paint is in good condition. If there is any paint peeling, it should be immediately repainted to prevent corrosion.

3.2 System Power-On

- Close the internal circuit breaker of the HYX-ECS.
- Close the external AC power circuit breaker.
- Observe whether the operation indicator light is functioning normally.
- Close the box transformer-side circuit breaker.
- After debugging is completed, please lock the cabinet and keep the key safe.

3.3 System Debugging

Please refer to section 6.2 "Device Debugging" in the HYX-Logger User Manual.
Scan the QR code to access it.