



eManual in the QR
code or at <http://www.solaxpower.com>



XHub

Installation Manual

Version 3.0

www.solaxpower.com

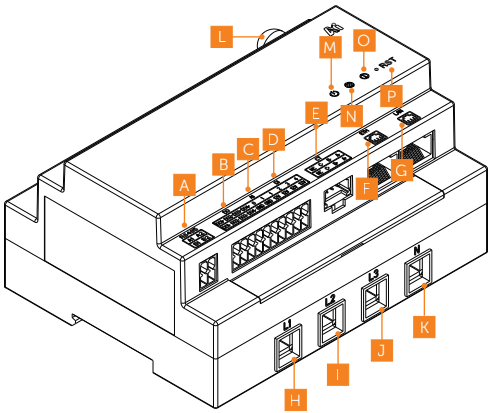
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1 Product Overview



No.	Item	Description
A	RS485 port	For communication cable connection
B	DO port	4 strings; For accessing DO signal; Input voltage: 3-8 VDC
C	AI port	2 strings; For accessing AI signal
D	DI port	4 strings; For accessing DI signal
E	CT port	For CT connection
F	ETH port	For FNN control box connection
G	LAN port	For router connection
H	L1 port	For L1 line connection
I	L2 port	For L2 line connection
J	L3 port	For L3 line connection
K	N port	For N line connection
L	Antenna port	For the transmittance of WiFi signal
M	Power indicator	Indicate the power status of XHub
N	Communication indicator	Indicate the communication status of XHub
O	Alarm indicator	Indicate the alarm message of XHub
P	Reset key	For resetting the device

2 PIN Definition

RS485	DO	AI	DI	CT	ETH	LAN
A1 A2 B1 B2	DO1+ DO2+ DO3+ DO4+ DO1- DO2- DO3- DO4-	0 1 GND GND	1 2 3 4 12V 12V 12V 12V	NC C- B- A- NC C+ B+ A+		

3 Scope of Delivery



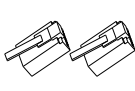
XHub x 1



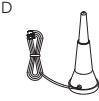
4-pin terminal x 1



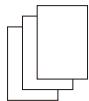
20-pin terminal x 1



RJ45 terminal x 2

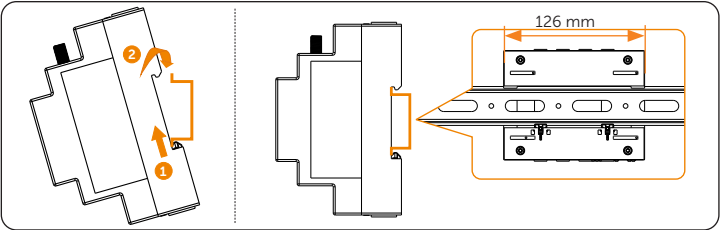


Antenna x 1



Document

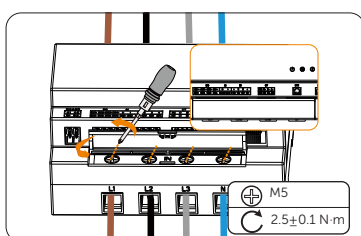
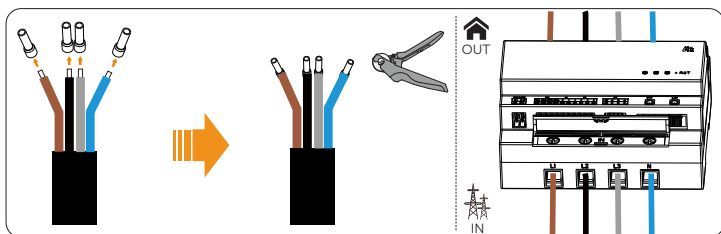
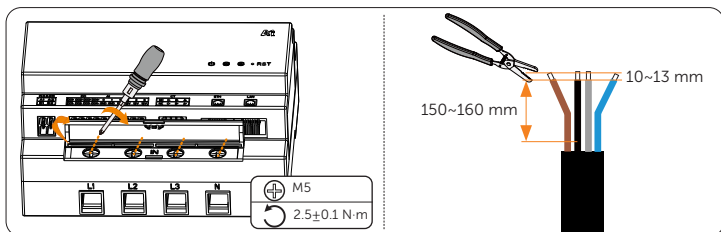
4 Installation



NOTICE!

- Mount the XHub on the 35 mm DIN rail of the AC power distribution box, ensuring that a surge protection device is installed.

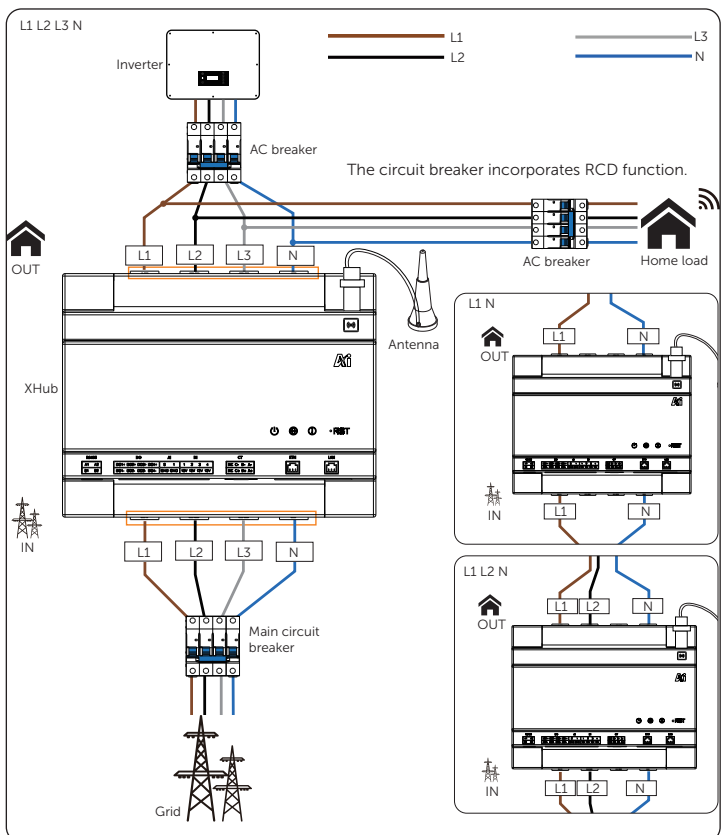
5 L1/L2/L3/N Line Installation



NOTICE!

- XHub supports L1/L2/L3/N, L/N and L1/L2/N connection. Choose the corresponding lines to install.

L/N line connection (no additional CT connection requirements):



The diagram illustrates the XHub system architecture. At the top, a legend identifies the wiring: L1 (brown), L2 (black), L3 (grey), and N (blue). It also shows current sampling points for L1, L2, L3, and N. The main system consists of an Inverter, an AC breaker, and an XHub unit. The Inverter is connected to the AC breaker, which is connected to the XHub. The XHub has three output lines (L1, L2, L3) and a neutral line (N) that connect to the Home load. The XHub also has a connection to the Grid. A note states: "The circuit breaker incorporates RCD function." The XHub unit is shown with an Antenna and a label "XHub". Below the main diagram, two detailed views of the XHub are provided: one for "L1 N" and one for "L1 L2 N". These views show the internal wiring and the connection to the Grid. The "L1 N" view shows the XHub connected to the Grid and the Home load. The "L1 L2 N" view shows the XHub connected to the Grid and the Home load, with an additional connection to the AC breaker. The diagram also shows the connection to the Inverter and the AC breaker, which is labeled "Main circuit breaker".

XHub port	L/N line	CT
A	L1	Yellow - A+; Black - A-
B	L2	Green - B+; Black - B-
C	L3	Red - C+; Black - C-

NOTICE!

- If users use the soft cable, please connect to the ferrules and crimp the ferrules; If users use the single-core copper cable, insert into the terminal directly.

Crimping tool for RJ45 terminal

RJ45 terminal

10~15 mm

1 8

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

FNN Control Box

PIN	1	2	3	4	5	6	7	8
Color	White with orange stripes	Orange	White with green stripes	Blue	White with blue stripes	Green	White with brown stripes	Brown

NOTICE!

- If users have to connect ripple control box and FNN control box at the same time, please use ETH connection to FNN control box.

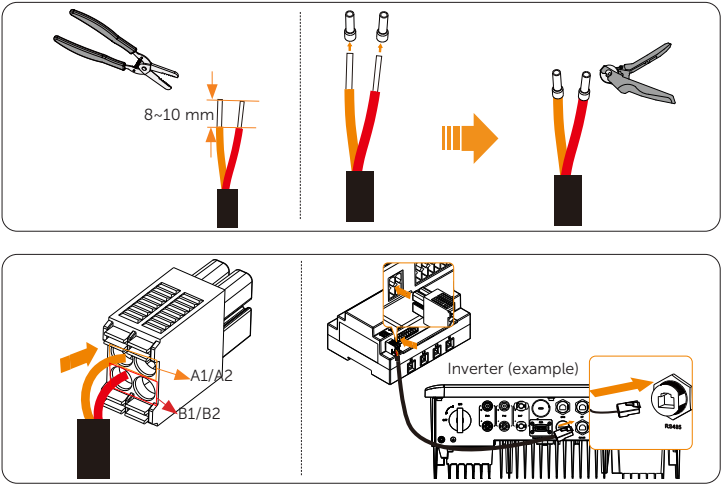
The diagram illustrates the process of connecting a router to a switch using an RJ45 cable. It is divided into three numbered steps:

- Step 1:** Stripping the outer jacket of the cable. The text indicates to "Strip the outer jacket of the cable (10-15 mm)".
- Step 2:** Crimping the RJ45 terminal. The text says "Crimping tool for RJ45 terminal" and "RJ45 terminal". An arrow points to the terminal being crimped onto the stripped wires. The length of the stripped wires is noted as "10-15 mm".
- Step 3:** Connecting the cable to the switch and router. The diagram shows the cable plugged into the "RJ45" port of a switch and the "RJ45" port of a router. The router is labeled "Router".

Below the diagram, a color-coded pinout table is provided for the RJ45 cable:

PIN	1	2	3	4	5	6	7	8
Color	White with orange stripes	Orange	White with green stripes	Blue	White with blue stripes	Green	White with brown stripes	Brown

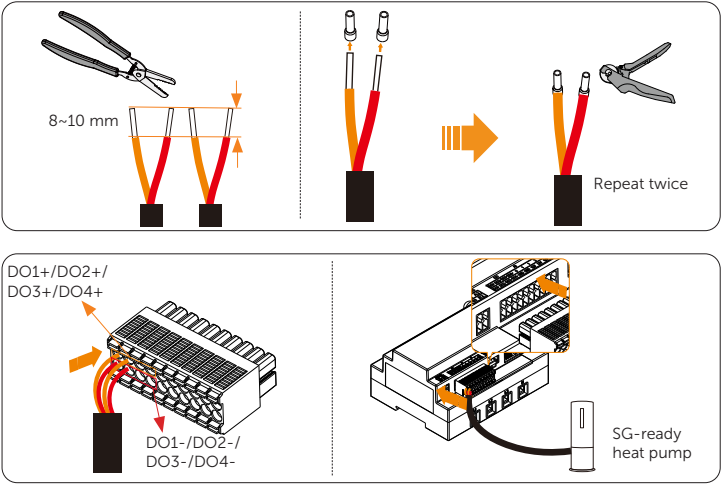
RS485 Communication Function



NOTICE!

- Please visit <https://www.solaxpower.com/products.html> for the RS485 installation of inverter side in detail.

DO Function



Pin of XHub	Pin of heat pump
DO1+/DO2+/DO3+/DO4+*	Pin28/Pin29*
DO1-/DO2-/DO3-/DO4-*	Pin G/Pin G*

*Connect any two DO+ to the heat pump's Pin 28 or 29, connect the corresponding two DO- to the heat pump's Pin G.

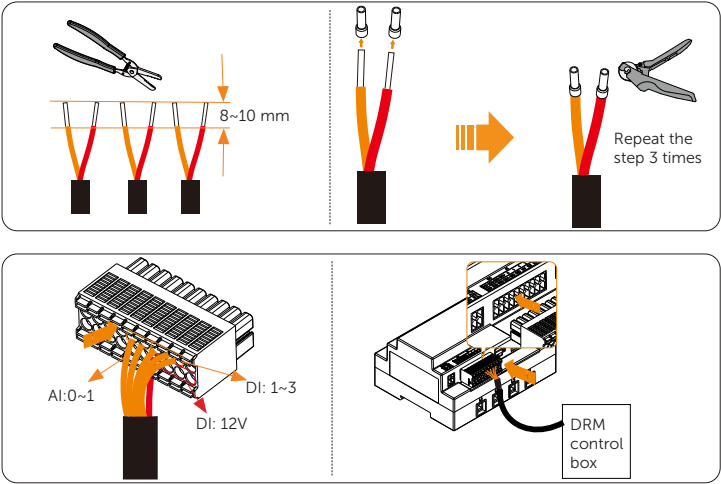
NOTICE!

- The positive terminal must be connected to the positive terminal of the heat pump, and the negative terminal must be connected the the negative terminal of the heat pump.

DRM Function

NOTICE!

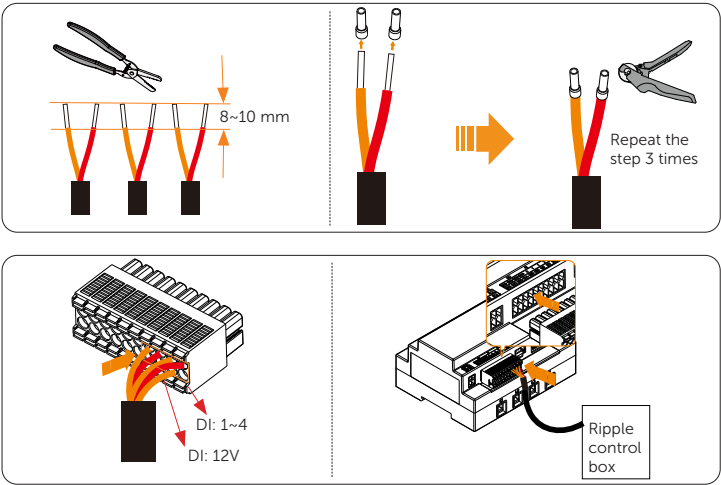
- DRM function is exclusive for inverters in Australian region.



Ripple Control Function

NOTICE!

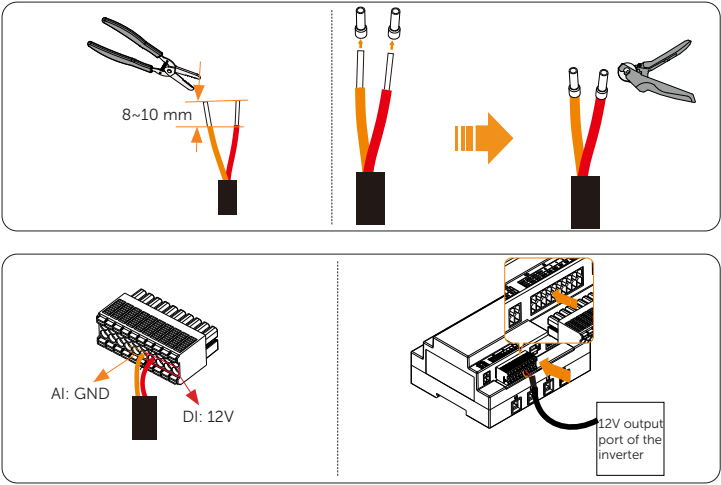
- Ripple control function is exclusive for inverters outside the Australian region.



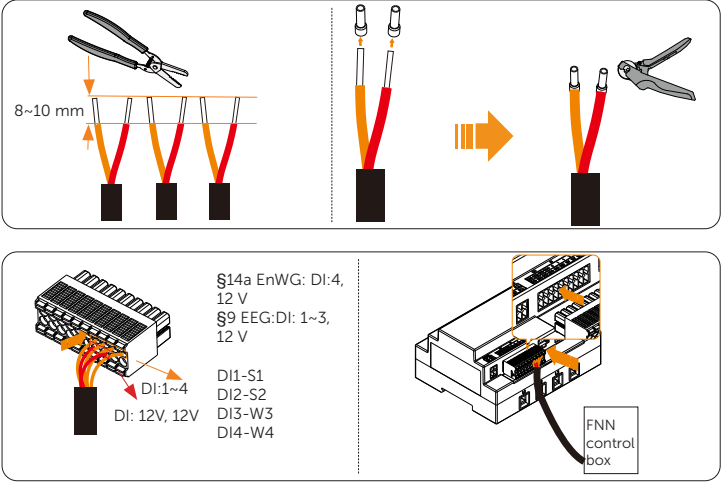
Power Supply Function

NOTICE!

- Power supply to XHub function is exclusive for grid-storage inverters.



§14a EnWG+§9 EEG



CT Connection

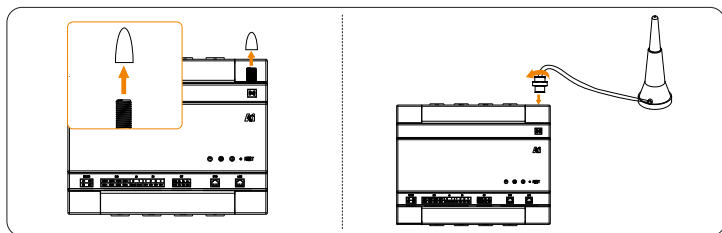
NOTICE!

- CT installation is optional. The XHub is equipped with an internal CT inside. If the users want to realize the export control function by meter or if the internal CT accuracy doesn't meet the users' requirements, please install an external CT.
- NC is normally closed.

NOTICE!

- EV-Charger and heat pump (purchased from SolaX) also support wireless connection.

Antenna Installation



7 Technical Data

Ethernet	10/100 M
Wi-Fi Frequency Range	2412-2472 MHz
Wi-Fi EIRP Power	14.5 dBm
Working Voltage	100-240 V~
Rated Frequency	50/60 Hz
Rated Power	5 W
Maximum Power	8 W
Dimensions	126*100*65 mm
Weight	600 g
Operating Temperature Range	-20°C ~ +60°C
Operating Humidity Range	5% ~ 95%
Working Altitude	3000 m
Degree of Protection	IP20
Measurement accuracy	1%
EMC	EN 55011 : 2016+A2 : 2021; EN IEC 61000-3-2 : 019+A1:2021; EN 61000-3-3 : 2013+A2 : 2021; EN 55035 : 2017+A11 : 2020; ETSI EN 301 489-1 V2.23: 2019; ETSI EN 301 489-17 V3.2.4: 2020; AS/NZS 61000.6.1; AS/NZS 61000.6.2; AS/NZS 61000.6.3; AS/NZS 61000.6.4; AS/NZS CISPR 32
Safety	EN62368; AS/NZS 62368.1
Cyber Security	EN 303645; EN 18031
Radio	ETSI EN 300 328 :2019; AS/NZS 4268; AS/NZS 2772.2
Health	EN IEC 62311:2020 EN 50665:2017

8 Network Configuration

Scan the following QR code for APP operation in detail.



Download APP



APP Operation Guide

9 CE Declaration of Conformity

Hereby, [SolaX Power Network Technology (Zhejiang) Co., Ltd.] declares that the radio equipment type [XHub] is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: <https://statics-oss.solaxcloud.com/guide/xhub/XHub-CE-Conformity-Declaration.pdf>.