

XHub

AI-Powered Management System

- Unified Dispatching of PV, Energy Storage, EV Chargers, Heat Pump, and Electrical devices.
- AI forcasts power gen/use, dynamically boost earnings and shorten payback periods.
- AI will devise optimal strategies tailored to your personalized preferences (e.g., charging targets).

Multi-Scenario Interconnected

- High-power loads intelligently dispatched by priority
- Pre-charge energy before outages or severe weather
- Smartly adjust grid import limits to reduce demand charges

Third-Party Ecosystem

- Compatible with EEBUS, SGready, Modbus, etc.,Integrate third-party Shelly/inverter devices — exceptional compatibility and powerful connectivity at your fingertips

**EEBUS functionality is restricted to XHub devices with the EEBUS tag.*

Grid-Friendly

- Supports §14a EnWG&§9 EEG, Ripple Control, DRM, 3-Phase Unbalanced Output — engineered for effortless compliance with grid regulations

solaxpower
www.solaxpower.com
info@solaxpower.com
+86 571-56260008

V1.5. Information may be subject to modify without notice. 650.00104.00

XHub

POWER SUPPLY	
AC input voltage	1P2W: 100 ~ 240 V, 50 Hz / 60 Hz; 3P4W: 100 ~ 240 V, 50 Hz / 60 Hz;
Power consumption	5 W typical (8 W peak)
INTERFACE	
LAN	10 / 100 Mbps
ETH	10 / 100 Mbps
WiFi	802.11 b / g / n (2.412 GHz ~ 2.484 GHz)
Bluetooth	BLE 5.1 (2.402 ~ 2.480 GHz)
RS485	RS485 × 2
Digital inputs	DI × 4
Digital outputs	DO × 4
Analog input	AI × 2
INTERACTION	
LED	LED Indicator × 3（RUN, ALM, COM）
Button	RST
APP	SolaXCloud
MEASUREMENT RANGE	
Current range	Direct connection: < 80 A, External CT: > 80 A
Voltage range	1P2W (L-N): 100~300 V; 3P4W (L-N): 100~300 V
Energy accuracy	±1 %
ENVIRONMENT LIMIT	
Operating temperature range	-20 ~ 60 °C
Relative humidity	5 % ~ 95 % RH(non-condensing)
Max. operation altitude	3000 m
Ingress protection	IP20
GENERAL	
Dimensions (W × H × D)	126 mm x 100 mm x 65 mm
Installation type	DIN - rail Mounting
Net weight	600 g
COMPLIANCE	
Compliance	CE, RCM, PSTI



XHub

User Manual

Version 3.0

www.solaxpower.com

eManual in the QR code or
at www.solaxpower.com/

2 Product Overview

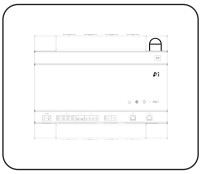
2.1 Product Introduction

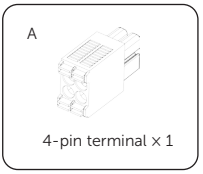
XHub is a special piece of equipment designed for smart home energy solutions, targeting residential scenarios. It aims to help households manage and utilize energy more efficiently, thereby reducing energy consumption and saving costs. It builds an energy AI model tailored to the personalized energy usage scenarios of households, providing a comprehensive solution for intelligent prediction and control of both the supply and demand sides of energy.

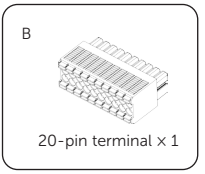
Highlights:

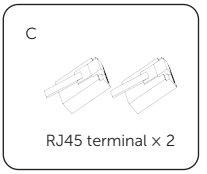
- Intelligent AI Management: Unified Dispatching of PV, Energy Storage, EV Chargers, etc. intelligently predict power Gen/Use, dynamically boost earnings by 50%+.
- Automations: Custom Triggers, Real-time Local Monitoring, Instant Execution
- Third-Party Ecosystem: Compatible with EEBUS, SGready, Modbus, etc.; Integrate Shelly devices.
- Grid-Friendly: Supports §14a EnWG+§9 EEG, Ripple Control, DRM, 3-Phase Unbalanced Output, etc. Ease of use: Intuitive App and web interface with transparent visualization of energy flows and savings potential.
- Future-proof: Support for dynamic electricity tariffs, modular extensibility for future technologies.
- Privacy & Security: Local data processing, encrypted communication to ensure privacy.

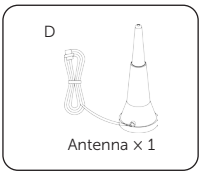
6.2 Scope of Delivery











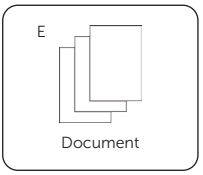


Table 6-1 Packing list

Item	Description	Quantity	Remark
/	XHub	1 pc	
A	4-pin terminal	1 pc	For RS485 connection
B	20-pin terminal	1 pc	For DO/DI/AI connection
C	RJ45 terminal	2 pcs	For LAN and ETH connection
D	Antenna	1 pc	
E	Document	-	

NOTICE!

- Refer to the actual delivery for the optional accessories.

Table 7-3 Descriptions of cables

Item	Cable	Type and specifications	Source
1	RS485 communication cable	Refer to "14 Technical Data"	Prepared by user
2	Signal cable		Prepared by user
3	Signal cable		Prepared by user
4	Signal cable		Prepared by user
5	Current sampling cable		Prepared by user
6	Communication cable		Prepared by user
7	Communication cable		Prepared by user

Table 7-4 Supported model

Type	Model
Energy-storage inverter	X1-Hybrid G4
	X1-IES
	X3-IES
	X3-ULTRA
	X3-Hybrid G4
	X3-Hybrid G4 PRO
	X3-IES-P
Grid-connected inverter	X3-MIC G2
	X3-PRO G2
EV Charger	A1-HAC
	C1-HAC
	C3-HAC
	X1-HAC
	X3-HAC
Plug (shelly)	Shelly Plus Plug S
	Shelly Plug S MTR GEN3 (White)
	Shelly Plug S MTR GEN3(Black)
	Shelly Outdoor Plug S GEN3
	Shelly Plus Plug UK

15 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 to +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