

THREE PHASE INVERTER

X3 PRO G2



Quick Installation Guide

PRODUCT FEATURES



Maximum Efficiency
Maximum Efficiency up to 99%



MPPT Voltage Range
180-1000Vdc MPPT Voltage Range



IP66 Protection
IP66 protection level



Multiple MPPTs
Maximum 12 MPPTs, 2 strings per MPP tracker



24h Monitoring
24 hours operation monitoring



Heat Dissipation
Heat Dissipation Technology

Safety

General Notice

1. Contents may be periodically updated or revised. SolaX reserves the right to make improvements or changes in the product(s) and the program(s) described in this manual without the prior notice.
2. The installation, maintenance and grid-related setting can only be performed by qualified personnel who:
 - Are licensed and/or satisfy state and local jurisdiction regulations;
 - Have good knowledge of this manual and other related documents.
3. Before installing the device, carefully read, fully understand and strictly follow the detailed instruction of the user manual and other related regulations. SolaX shall not be liable for any consequences caused by the violation of the storage, transportation, installation, and operation regulations specified in this document and the user manual.
4. Use insulated tools when installing the device. Individual protective tools must be worn during installation, electrical connection and maintenance.
5. Please visit the website www.solaxpower.com of SolaX for more information.

Descriptions of Labels

	CE mark of conformity		TUV certification
	RCM mark of conformity		UKCA mark of conformity
	BIS mark of conformity		Caution, hot surface
	Caution, risk of electric shock		Caution, risk of danger
	Read the enclosed documentations		Do not dispose of the inverter together with household waste.
	Additional grounding point		
	Do not operate this inverter until it is isolated from mains and on-site PV generation suppliers.		
	Danger of high voltage. Do not touch live parts for 5 minutes after disconnection from the power sources.		

Note: The table is only used for the description of symbols which may be used on the inverter. Please be subject to the actual symbols on the device.

** DANGER!****Lethal danger from electrical shock due to the inverter**

- Only operate the inverter when it is technically faultless. Otherwise, electric shock or fire may occur.
- Do not open the enclosure in any case without authorization from SolaX. Unauthorized opening will void the warranty and cause lethal danger or serious injury due to electric shock.

** DANGER!****Lethal danger from electrical shock due to the PV**

- When exposed to sunlight, high DC voltage will be generated by PV modules. Death or lethal injuries will occur due to electric shock.
- Never touch the positive or negative pole of PV connecting device. Touching both of them at the same time is prohibited as well.
- Do not ground the positive or negative pole of the PV modules.
- Only qualified personnel can perform the wiring of the PV panels.

** WARNING!****Risk of personnel injury or inverter damage**

- During operation, do not touch any parts other than DC switch and LCD panel.
- Never connect or disconnect the AC and DC connectors when the inverter is running.
- Turn off the AC and DC power and disconnect them from the inverter, wait for 5 minutes to fully discharge the voltage before attempting any maintenance, cleaning or working on any circuits connected.
- Make sure that the input DC voltage $\leq$ Maximum DC input voltage of the inverter. Overvoltage may cause permanent damage to the inverter, which is NOT covered by the warranty.

** CAUTION!**

- Keep children away from the inverter.
- Pay attention to the weight of the inverter. Personal injuries may be caused if not handled properly.

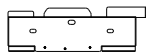
NOTICE!

- If an external RCD is required by local regulations, check which type of RCD is required for relevant electric codes. It is recommended to use a Type-A RCD with the value of 300 mA.
- All the product labels and nameplate on the inverter shall be maintained clearly visible.

Packing List / Packliste / Liste du matériel livré / Lista de piezas / Lista da embalagem / Paklijst / Contenuto della confezione / Zawartość opakowania / Seznam balení / Packlista / Listă de ambalare / Опаковъчен лист / Pakkeliste / Λίστα συσκευασίας / Pakkeleht / Pakkausluettelo / Popis pakiranja / Csomaglista / Pakuotės turinys / Iepakojumā saraksts / Zoznam položiek balenia / Seznam pakiranja / Kutu Listesii / Lista de Embalagem



Inverter x 1



Bracket x 1



Expansion tube x 3



Self-tapping screw x 3



Washer x 3



M5 inner hexagonal screw x 1



Terminal sleeve for grounding x 1



R-type terminal for grounding x 1



AC waterproof cover x 1



R-type terminal for AC connection x 5



Terminal sleeve for AC connection x 5



PV connector x 4 or 6 pairs *



PV pin contact x 4 or 6 pairs *



Terminal block x 1



RJ45 terminal x 1



Documents



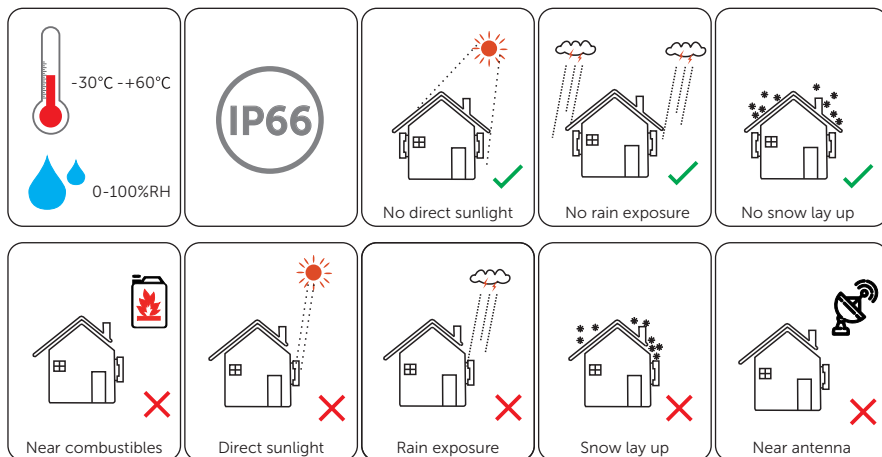
Dongle (Optional) x 1



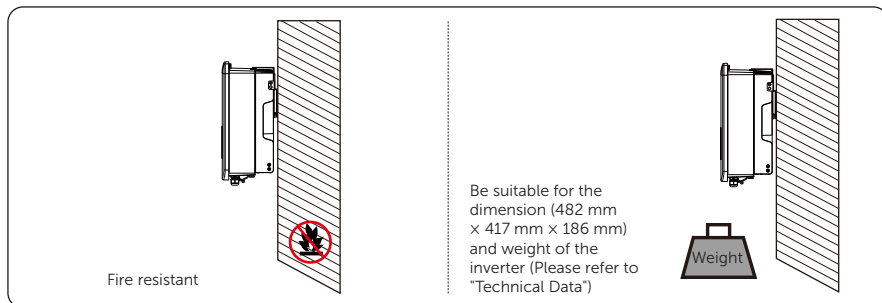
Electricity meter (Optional) x 1

*Positive x 4 and Negative x 4 for inverters with two inputs of MPPT,
Positive x 6 and Negative x 6 for inverters with three inputs of MPPT
** Refer to the actual delivery for the optional accessories.

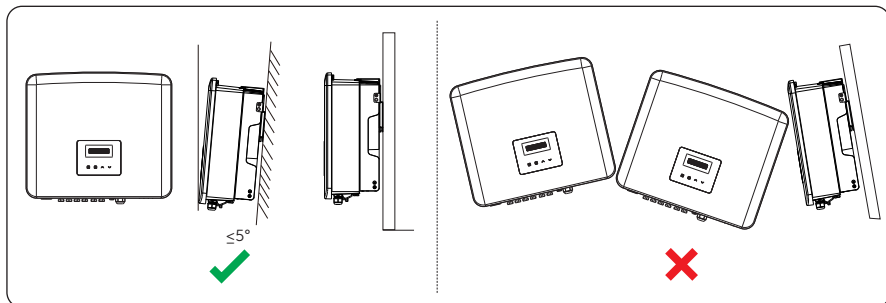
Installation Site / Installationsort / Site d'installation / Sitio de instalación / Local de instalação / Installatiesite / Sito di installazione / Miejsce instalacji / Místo instalace / Installationsplats / Loc de instalare / Монтажен объект / Monteringssted / Τόπος εγκατάστασης / Paigaldamise koht / Asennuspaikka / Lokacija ugradnje / Telepítési helyszín / Montavimo vieta / Uzstādīšanas vieta / Miesto inštalácie / Mesto namestitve / Kurulum Yeri / Local de Instalação



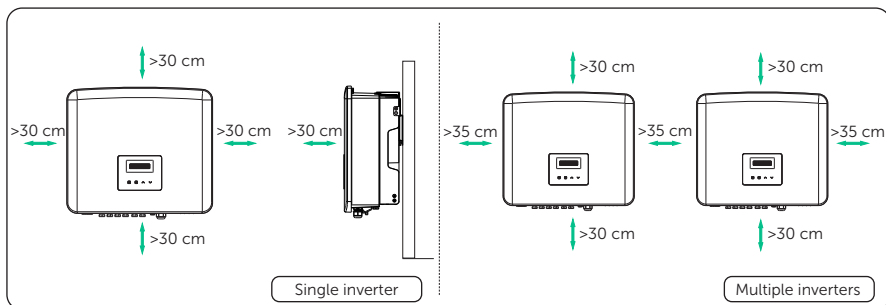
Installation Carrier / Installationsträger / Partie porteuse / Soporte de instalación / Suporte de Instalação / Installatiedrager / Supporto di installazione / Powierzchnia montażowa / Nosič instalace / Installationsfästen / Suport instalație / Монтажна основа / Monteringsholder / Μεταφορέας εγκατάστασης / Paigalduskandja / Asennusteline / Nosač za ugradnju / Telepítési szolgáltató / Montavimo pagrindas / Instalācijas turētājs / Nosnā konstrukcija pre inštalāciju / Namestitveni nosilec / Kurulum Taşıyıcı / Portador de Instalação



Installation Angle / Installationswinkel / Angle d'installation / Ángulo de instalación / Ângulo de instalação / Installatiehoek / Angolazione di installazione / Kąt instalacji / Instalační úhel / Installationsvinkel / Unghi de instalare / Монтажен ъгъл / Monteringsvinkel / Γωνία εγκατάστασης / Paigaldusnurk / Asennuskulma / Kut ugradnje / Telepítési szög / Montavimo kampas / Uzstādīšanas leņķis / Uhol inštalácie / Namestitveni kot / Kurulum Açısı / Ângulo de Instalação



Installation Space / Installationsraum / Espace d'installation / Espacio de instalación / Espaço de instalação / Installatieruimte / Spazio di installazione / Przestrzeń instalacyjna / Instalační prostor / Installationsutrymme / Spațiu de instalare / Монтажно пространство / Monteringsplads / Χώρος εγκατάστασης / Paigaldusruum / Asennustila / Mjesto ugradnje / Telepítési tér / Montavimo erdvė / Uzstādīšanas telpa / Priestor pre inštaláciu / Prostor za namestitev / Kurulum Alanı / Espaço de Instalação



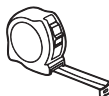
Installation Tools / Installationswerkzeuge / Outils d'installation / Herramientas de instalación / Ferramentas de instalação / Installatiemiddelen / Utensili di installazione / Narzędzia do instalacji / Instalační nástroje / Verktyg för installation / Instrumente de instalare / Монтажни инструменти / Monteringsværktøjer / Εργαλεία εγκατάστασης / Paigaldamise tööriistad / Asennustyökalut / Alati za ugradnju / Telepítő eszközök / Montavimo įrankiai / Uzstādīšanas instrumenti / Nástroje pre inštaláciu / Orodja za namestitev / Kurulum Araçları / Ferramentas de Instalação



Hammer drill



Multimeter



Measuring tape



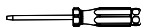
Utility knife



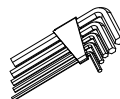
Marker



Cross screwdriver



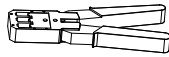
Flat-head
screwdriver



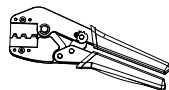
Allen key



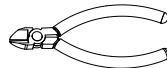
Wire stripper



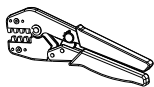
Crimping tool
for RJ45



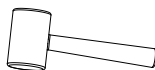
Crimping tool
for PV terminal



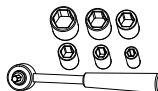
Diagonal pliers



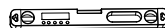
Crimping tool for
R-type terminal



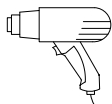
Rubber mallet



Torque wrench



Spirit level



Heat gun



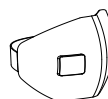
Safety gloves



Safety boots



Safety goggles



Anti-dust mask

Additionally Required Materials / Zusätzlich erforderliche Materialien / Matériaux supplémentaires requis / Materiales adicionales necesarios / Materiais Adicionais Necessários / Extra benodigde materialen / Materiali aggiuntivi necessary / Materiały wymagane dodatkowo / Další požadované materiály / Ytterligere materialkrav / Materiale suplimentare necesare / Други необхідими матеріали / Yderligere nødvendige materialer / Πρόσθετα απαιτούμενα υλικά / Täiendavad vajalikud materjalid / Muut vaaditud materiaalit / Potrebni dodatni materijali / További szükséges anyagok / Papildomos reikalingos medžiagos / Papildus vajadzīgie materiāli / Dodatočne požadované materiály / Dodatno zahtevani materiali / Ayrıca Gerekli Malzemeler / Materiais Adicionais Necessários

No.	Required Material	Type	Conductor Cross-section
1	AC circuit breaker	Refer to below tables	/
2	PV cable	Dedicated PV wire withstand voltage 1100 V (8 kW~30 kW) / 800V (10 kW-LV~15 kW-LV)	4 mm ²
3	AC cable	Five-core copper wire	Refer to below tables
4	Communication cable	Network cable CAT5	0.2 mm ²
		Two-core cable for RS485 connection	0.5-1.5 mm ² Outer diameter: 5-6.7 mm
5	Additional PE cable	Conventional yellow and green wire	6 mm ²

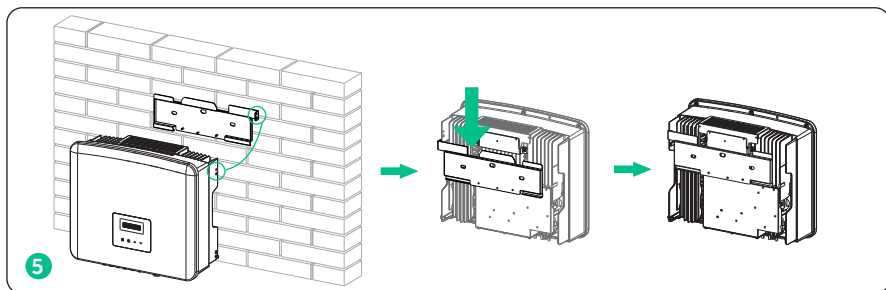
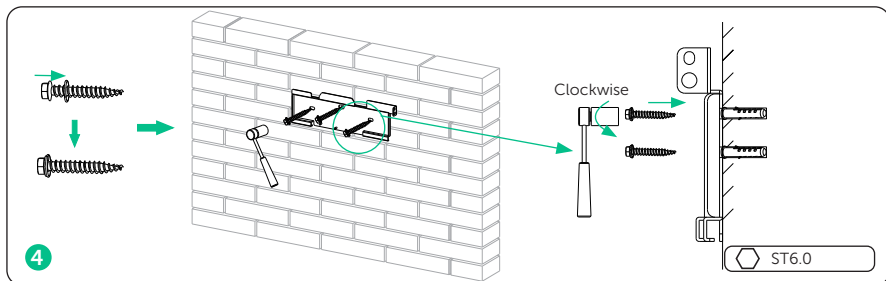
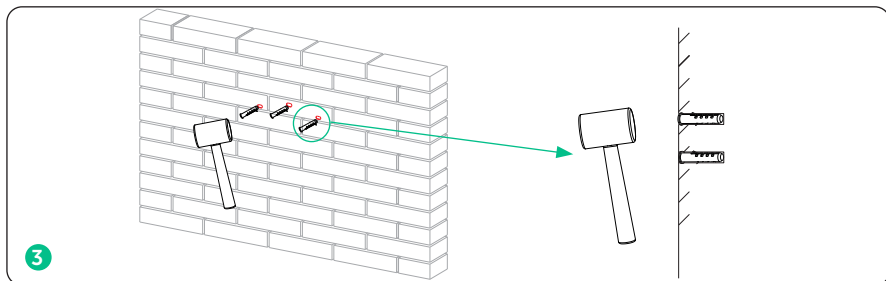
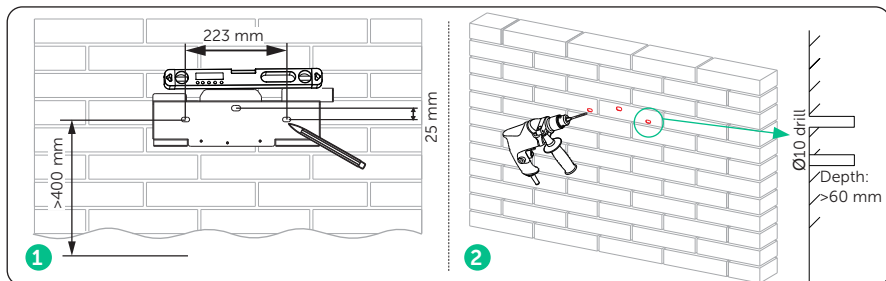
• AC Cable and Micro-breaker recommended

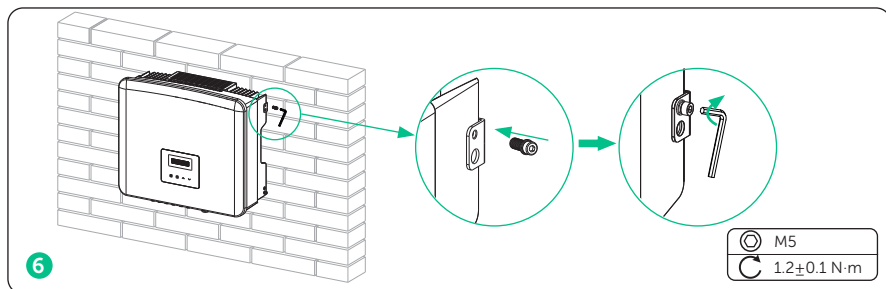
Model	X3-PRO-8K-G2(2D)	X3-PRO-10K-G2(2D)	X3-PRO-12K-G2(2D)	X3-PRO-15K-G2(2D)	X3-PRO-17K-G2(2D)	X3-PRO-20K-G2(2D)
L1, L2, L3 wire	5-6 mm ²	5-6 mm ²	5-6 mm ²	5-6 mm ²	6-8 mm ²	6-8 mm ²
N, PE wire	5-6 mm ²	5-6 mm ²	5-6 mm ²	5-6 mm ²	6-8 mm ²	6-8 mm ²
Micro-breaker	20 A	20 A	25 A	32 A	40 A	40 A

Model	X3-PRO-15K-G2(3D)	X3-PRO-17K-G2(3D)	X3-PRO-20K-G2(3D)	X3-PRO-25K-G2(3D)	X3-PRO-30K-G2(3D)	X3-PRO-10KW-G2
L1, L2, L3 wire	5-6 mm ²	6-8 mm ²	6-8 mm ²	8-10 mm ²	10 mm ²	5-6 mm ²
N, PE wire	5-6 mm ²	6-8 mm ²	6-8 mm ²	8-10 mm ²	10 mm ²	5-6 mm ²
Micro-breaker	32 A	40 A	40 A	50 A	63 A	20 A

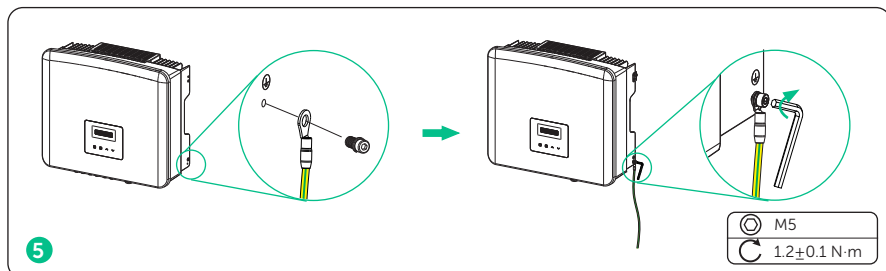
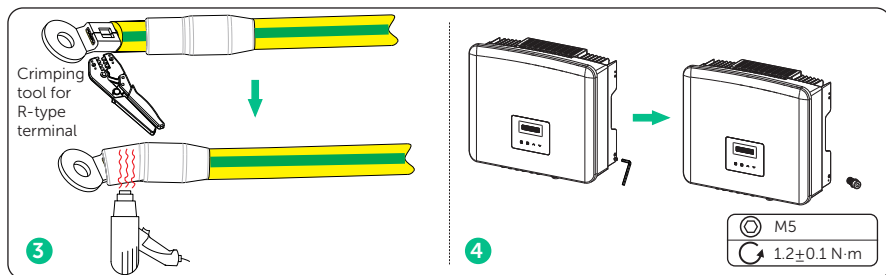
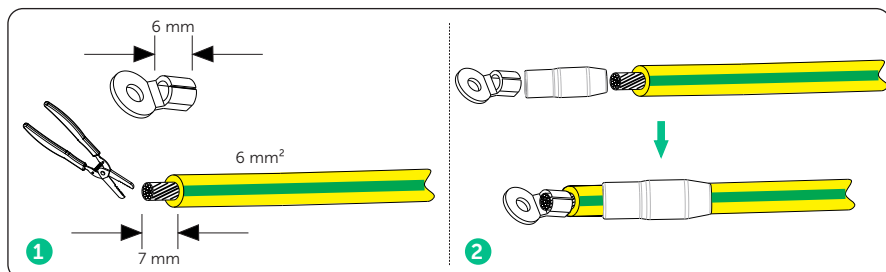
Model	X3-PRO-10K-G2-LV	X3-PRO-12K-G2-LV	X3-PRO-15K-G2-LV
L1, L2, L3 wire	6-8 mm ²	8-10 mm ²	10 mm ²
N, PE wire	6-8 mm ²	8-10 mm ²	10 mm ²
Micro-breaker	40 A	50 A	63 A

Mechanical Installation / Mechanische Installatie / Installation mécanique / Instalación mecánica / Instalação mecânica / Mechanische installatie / Installazione meccanica / Instalacja mechaniczna / Mechanická instalace / Mekanisk installation / Μηχανική εγκατάσταση / Mehaaniline paigaldus / Mekaaninen asennus / Mehanička ugradnja / Mechanikai telepítés / Mechaninis montavimas / Mehāniskā uzstādīšana / Mechanická inštalácia / Mehanska namestitvev / Mekanik Kurulum / Instalação Mecânica

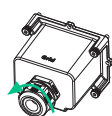




PE Connection / Schutzerdungs-Anschluss / Connexion PE / Conexión PE / Ligação à Terra / PE-aansluiting / Collegamento PE / Połączenie PE / PE připojení / PE-anslutning / Conexiune PE / PE връзка (земя) / Jordforbindelse / Σύνδεση PE / PE ühendus / PE-yhteys / PE priključak / PE bekötés / PE (apsauginio įžeminimo) kontaktas / PE savienojums / Pripojenie ochranného vodiča / PE povezava / PE Bağlantısı / Conexão PE



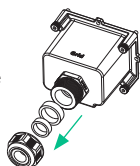
AC Side Connection / Wechselstrom-seitiger Anschluss / Connexion côté CA / Conexión lateral de CA / Ligação lateral CA / Aansluiting wisselspanningszijde / Collegamento lato CA / Połączenie po stronie AC / Boční připojení střídavého proudu / Anslutning på AC-sidan / Conexiune laterală c.a. / СВЪРЪЗВАНЕ ОТ АС СТРАНАТА / AC-sidetilslutning / Πλαϊνή σύνδεση AC / Vahelduvvoolpoolne ühendus / AC-puolen liitäntä / Priključak za izmjeničnu struju (AC) / Váltóáram-oldali bekötés / AC (kint. sr.) šoninis kontaktas / Maiņstrāvas puses savienojums / Pripojenie na strane striedavého prúdu / AC stranska povezava / AC Yan Bağlantı / Conexão do Lado CA



Disassemble

AC waterproof cover
from accessory box

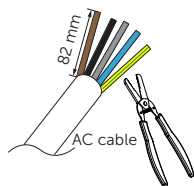
1



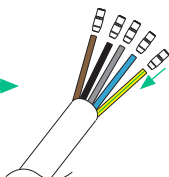
2

AC cable

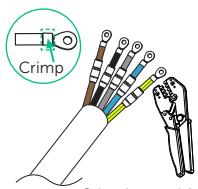
Diameter (mm)	Sealing ring(s)
12-18	a+b
18-25	a



3

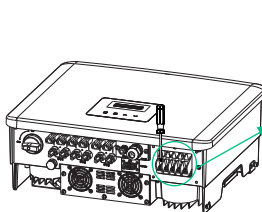


4

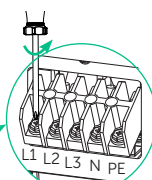


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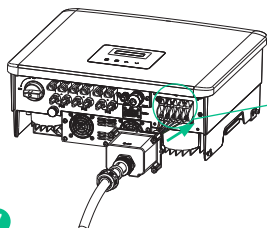
Crimping tool for
R-type terminal



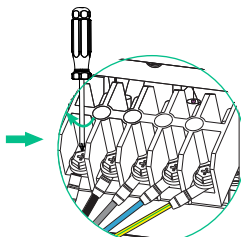
6



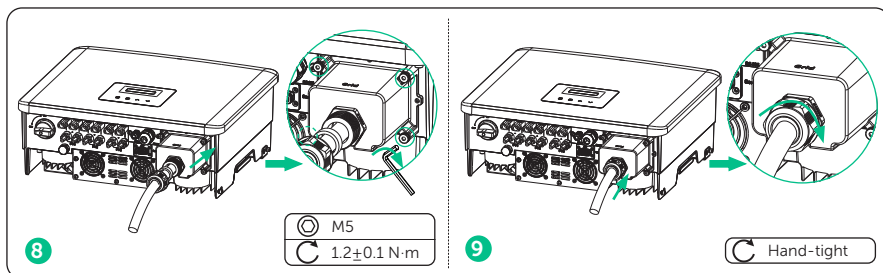
M4
1.2±0.1 N·m



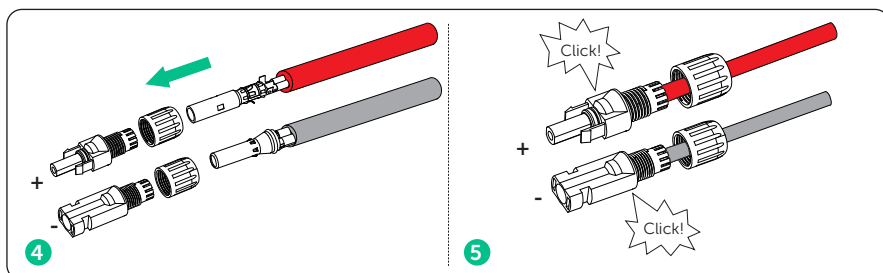
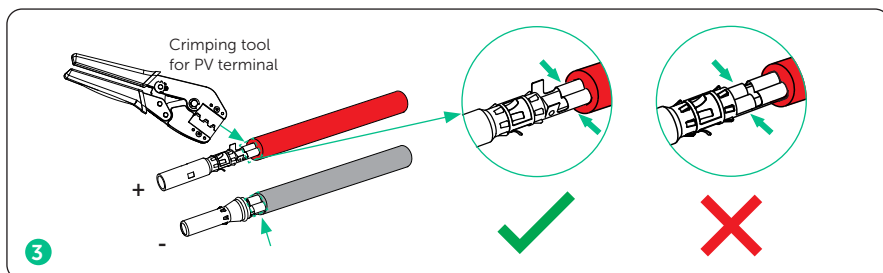
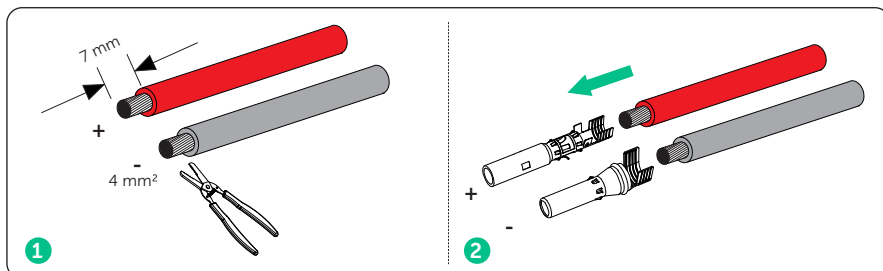
7

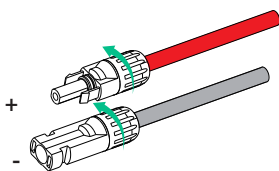


M4
1.2±0.1 N·m



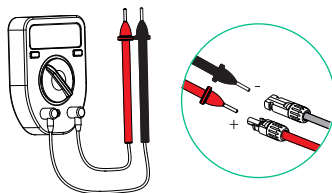
DC Side Connection / Gleichstrom-seitiger Anschluss / Connexion côté CC / Conexión lateral de CC / Ligaçao lateral CC / Aansluiting gelijkspanningszijde / Collegamento lato CC / Połączenie po stronie DC / Boční připojení stejnosměrného proudu / Anslutning på DC-sidan / Conexiune laterală c.c. / Свързване от DC страната / DC-sidetilslutning / Πλαϊνή σύνδεση DC / Alalisvoolupoolne ühendus / DC-puolen liitäntä / Priključak za istosmjernu struju (DC) / Egyenáram-oldali bekötés / DC (nuol. sr.) šoninis kontaktas / Līdzstrāvas puses savienojums / Pripojenie na strane jednosmerného prúdu / DC stranska povezava / DC Yan Bağlantı / Conexão do Lado CC





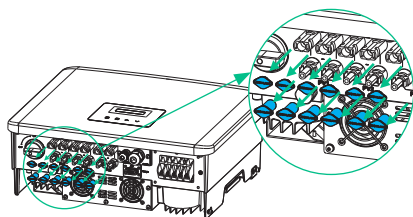
6

Hand-tight

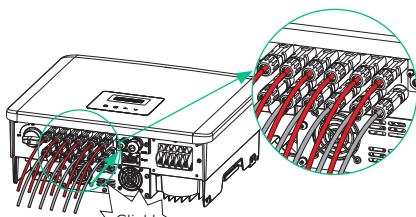


7

8 kW~30 kW: ≤ 1100 V
10 kW-LV~15 kW-LV: ≤ 800 V



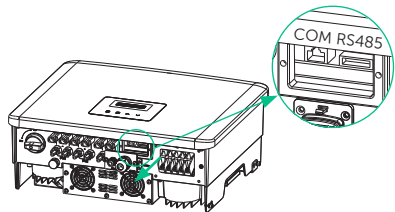
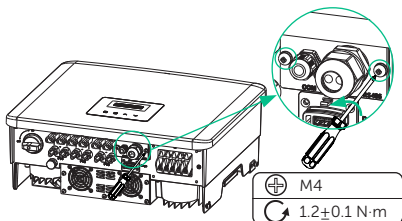
8



9

* Seal the unused PV terminals with the terminal caps.

Communication Connection / Kommunikations-Anschluss / Branchement de communication / Conexión de comunicación / Ligação à Comunicação / Communicatie-aansluiting / Collegamento comunicazione / Połączenie komunikacyjne / Komunikační připojení / Kommunikationsanslutning / Conexiune de comunicare / Коммуникационная връзка / Kommunikationsforbindelse / Σύνδεση επικοινωνίας / Sideühendus / Tiedonsiirtoliitäntä / Priklučak za komunikaciju / Komunikācijas bekotēs / Duomenų ryšys / Sakaru savienojums / Pripojenie komunikácie / Komunikacijska povezava / İletişim Bağlantısı / Conexão de Comunicação



M4
 1.2 ± 0.1 N·m

COM RS485

Pin Definition

COM port



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

RS485 port



a. Pin Definition for DRM (For AU / NZ)/Dry Contact/Heat Pump Controller

Item	Dry Contact		Heat Pump Controller		DRM		-	-
Pin	1	2	3	4	5	6	7	8
Pin Definition	Dry Contact+	Dry Contact-	Heat Pump Controller+	Heat Pump Controller-	REF GEN	DRM0	X	X

* For DRM, only DRM 0 is available now.

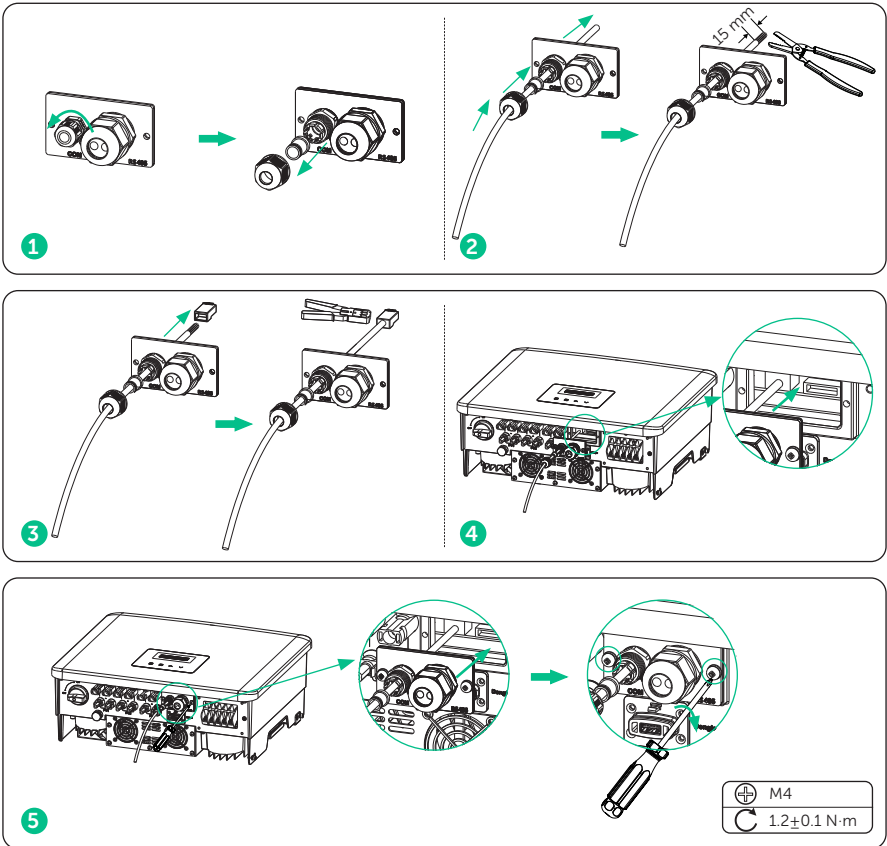
b. Pin Definition for RS485/Meter

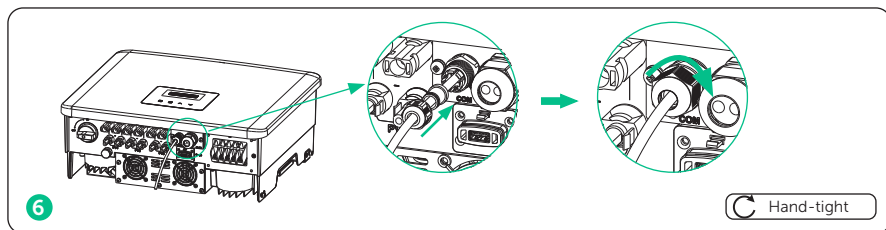
Pin	a	b	c	d	e	f
Pin Definition	485A	485B	485A	485B	Meter A	Meter B

• Connection Method

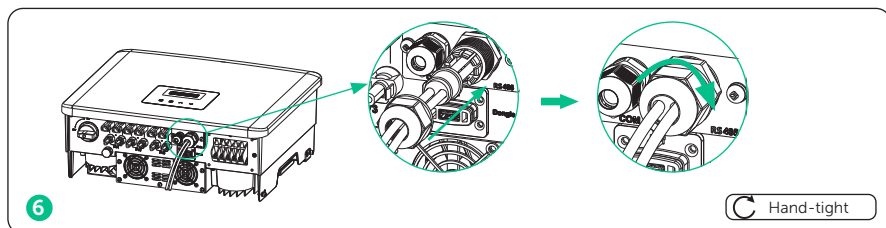
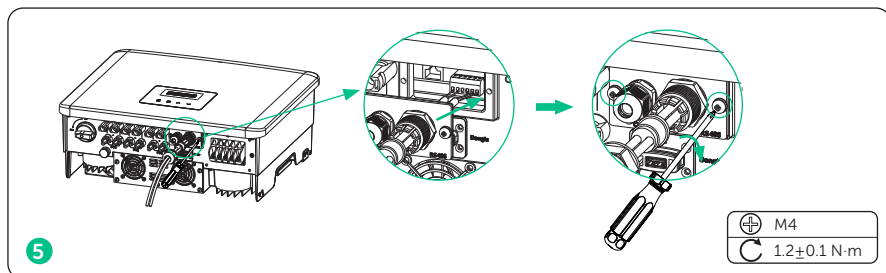
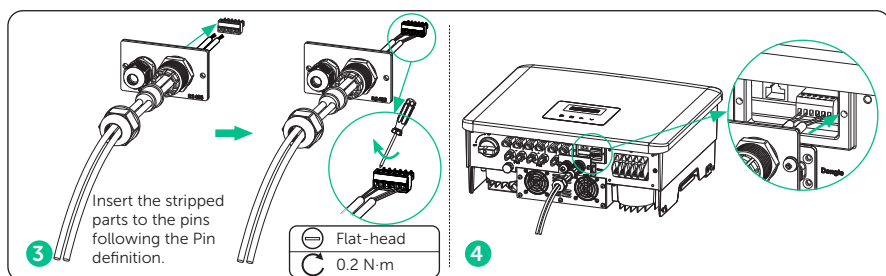
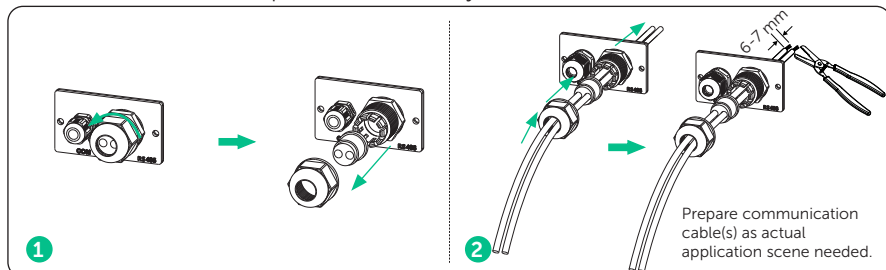
Note: Connect the COM port and the RS485 port respectively or simultaneously according to the actual application scene.

a. Possible scene 1: COM port connection only

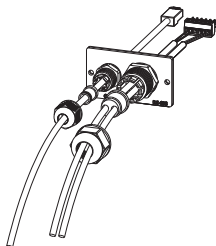
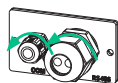




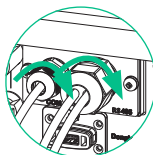
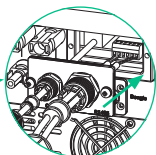
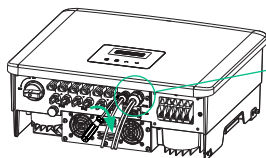
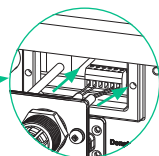
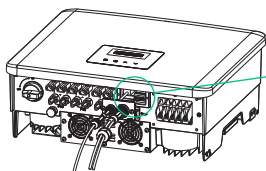
b. Possible scene 2: RS485 port connection only



c. Possible scene 3: COM port and RS485 port connections simultaneously

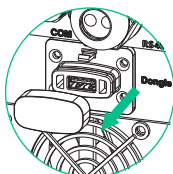
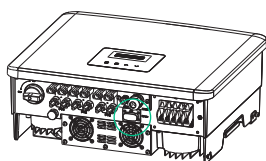


Prepare the communication cables for COM and RS485 connections as described in the above content when both ports are to be connected at the same time.

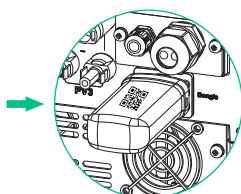
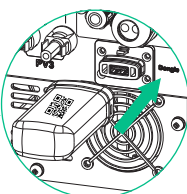
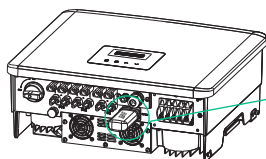


Tighten the screws and the fastening heads as described in the above content.

Monitoring Connection / Überwachungs-Anschluss / Branchement de surveillance / Conexión de monitorización / Ligaçao à Monitorização / Monitoring-aansluiting / Collegamento monitoraggio / Potężenie na potrzeby monitorowania / Pripojení ke sledování / Övervakningsanslutning / Conexiune de monitorizare / Мониторингова връзка / Övervågningsforbindelse / Σύνδεση παρακολούθησης / Seire ühendus / Valvontaliitäntä / Priklučak za nadzor / Monitoring bekötés / Stebėjimo ryšys / Uzraudzības savienojums / Pripojenie monitorovania / Povezava za spremljanje / Izlema Bağlantısı / Conexão de Monitoramento



1

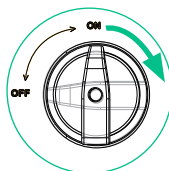
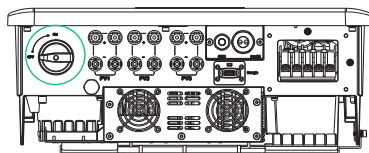


Keep "QR Code" upwards.

2

Power on the System / Schalten Sie das System ein / Mise sous tension du système / Encienda el sistema / Ligue o sistema / Het systeem inschakelen / Accensione del sistema / Włączanie systemu / Zapnutí systému / Slå på systemet / Pornire sistem / Включване на системата / Tænd for systemet / Ρεύμα στο σύστημα / Süsteemi sisselülitamine / Kytke järjestelmän virta päälle / Napajanje sustava / Rendszer áram alá helyezés / Ijungi sistemą / Ieslēdziet sistēmu / Zapnite system / Vklópite sistem / Sistemin Gücü / Ligar o Sistema

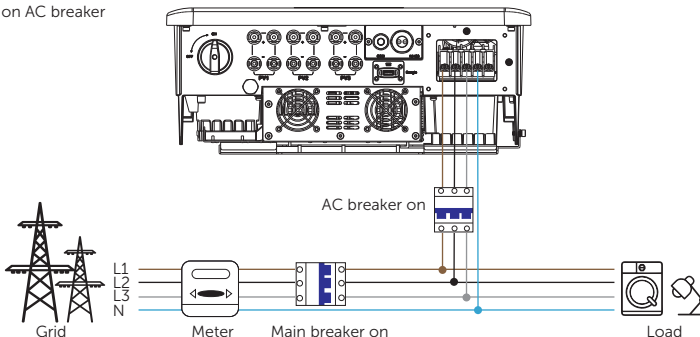
Turn on DC switch



1

Turn on AC breaker

2



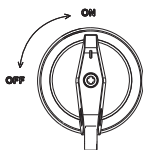
Australian Version DC Switch / DC-Schalter in Australischer Version / Interrupteur CC version australienne / Interruptor de CC de la versión Australiana / Interruptor DC Versão Australiana / Australische versie DC-schakelaar / Interruttore CC versione Australiana / Przełącznik DC w wersji na rynek australijski / DC vypínač australské verze / Australisk version av strö mbrytare / Comutator DC versiune australiană / DC превключвател, австралийска версия / Australsk version – DC-afbryder / Διακόπτης συνεχούς ρεύματος αυστραλιανής έκδοσης / Austraalia-tüüpi alalisvoolu-lüliti / Australialainen tasavirtakytkin / Australska inačica prekidača istosmjernje struje (DC) / Ausztrál változatú egyenáramú kapcsoló / Australiška nuolatinės srovės jungiklio versija / Līdzstrāvas slēdža Austrālijas versija / Australská verzia spínača jednosmerného prúdu / Avstralska različica stikala DC / Avstralya Versiyonu DC Anahtarı / Interruptor CC Versão Australiana

There are two kinds of DC switch for the series inverters:

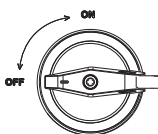
- General version (without lock; applied to most countries and regions);
- Australian version (with lock; applied to Australia and New Zealand).

a. States of the Australian version DC switch:

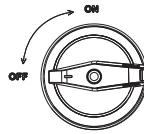
For the Australian version DC switch, there are 3 states: ON, OFF and OFF+Lock and the default state is OFF.



ON



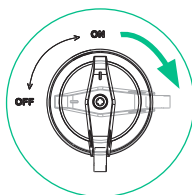
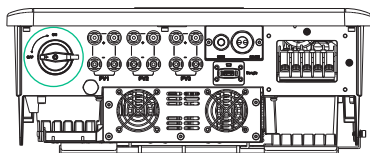
OFF



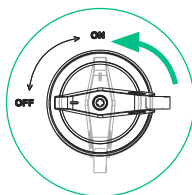
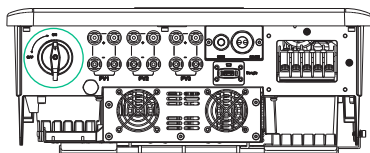
OFF+Lock

b. Operation of the Australian version DC switch:

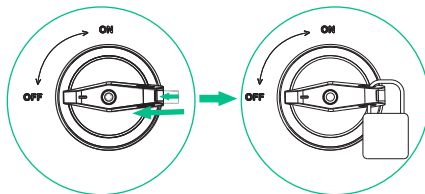
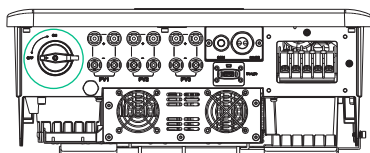
To turn on the Australian version DC switch



To turn off the Australian version DC switch

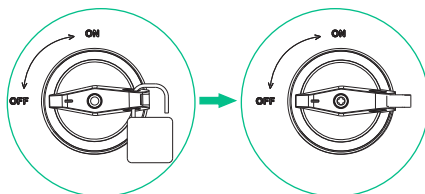
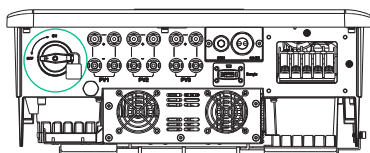


To lock the Australian version DC switch

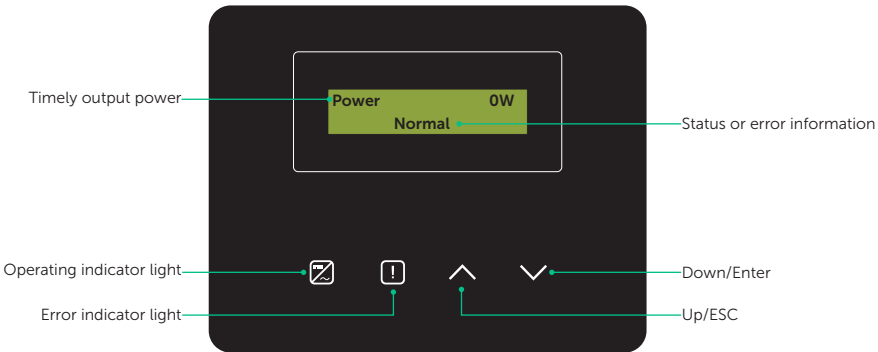


* Please prepare a lock in advance.

To unlock the Australian version DC switch



LCD Panel / LCD-Bildschirm / Panneau LCD / Panel LCD / Paineel de LCD / LCD-paneel / Pannello LCD / Panel LCD / LCD panel / LCD-panel / Panou cu LCD / LCD панель / LCD-panel / Πάνελ LCD / LCD-paneel / LCD-paneeli / LCD ploča / LCD panel / LCD skydas / LCD panelis / LCD Panel / LCD plošča / LCD Panel / Paineel LCD

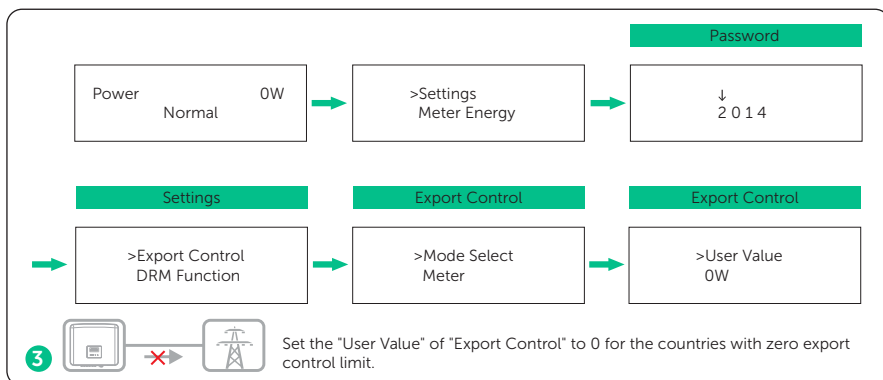
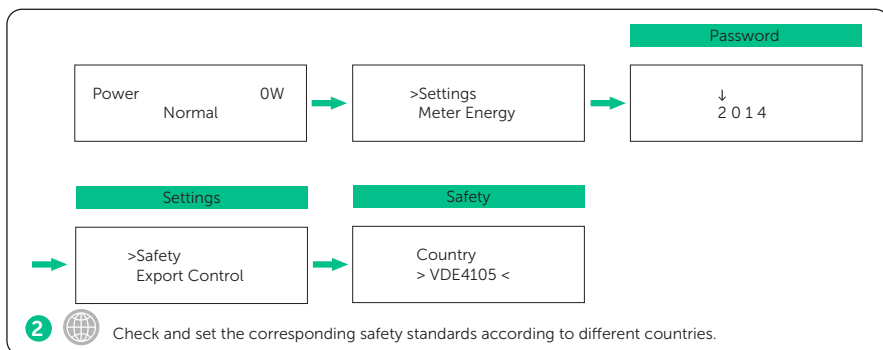
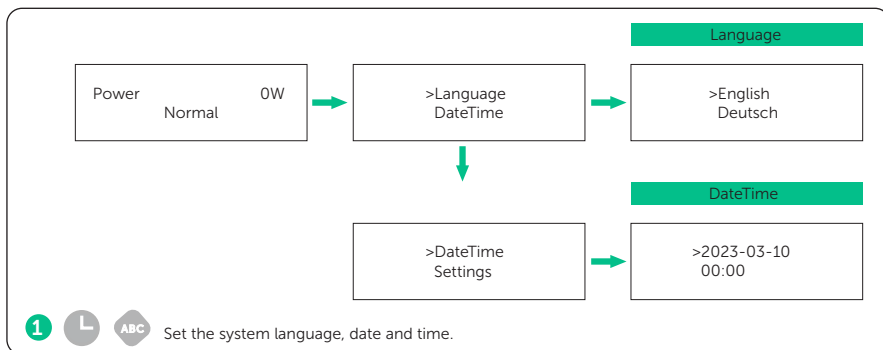


- In normal state, the "Power" / "Pgrid" / "Today" / "Total" information will be displayed respectively. You can press the keys to switch information.
- In error state, the fault message will be displayed, please refer to corresponding solutions in the user manual.

LED indicator	Definition
	Light in blue: The inverter is in normal state. Flash in blue: The inverter is in waiting state.
	Light in red: The inverter is in fault state.

Key	Definition
	Short press: Up, move the cursor to the upper part or increase the value. Long press: ESC, exit from the current interface or function, or confirm the function setting to take effect.
	Short press: Down, move the cursor to the lower part or decrease the value. Long press: Enter, confirm the selection or value change.

General Setting / Allgemeine Einstellungen / Paramètres généraux / Configuración general / Definição Geral / Algemene instelling / Impostazione generale / Ustawienia ogólne / Obecné nastavení / Generell inställning / Setare general / Обща настройка / Genel indstilling / Γενική τοποθέτηση / Üldine seadistus / Yleisasetus / Опće postavke / Általános beállítás / Bendrasis nustatymas / Vispārīgs iestatījums / Všeobecné nastavenie / Splošna nastavitve / Genel Ayar / Configuração Geral

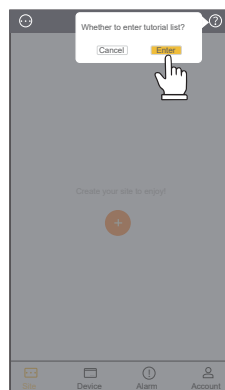
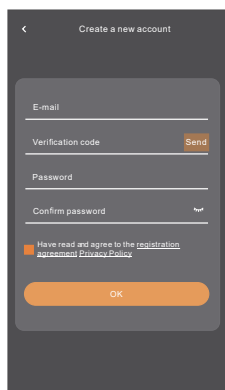
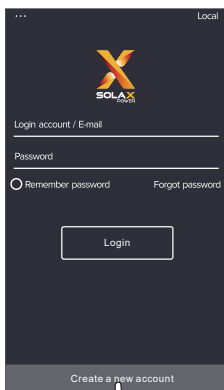


* The initial password is 2014 which should be changed for the consideration of account security.

Wi-Fi Configuration / WLAN-Konfiguration / Configuration Wi-Fi / Configuración de wifi / Configuração de Wi-Fi / Wi-Fi-configuratie / Configurazione del Wi-Fi / Konfiguracja Wi-Fi / Konfigurace Wi-Fi / Wi-Fi-konfiguration / Configurare Wi-Fi / Wi-Fi конфигурация / WiFi-konfiguration / Ρυθμίσεις παραμέτρων Wi-Fi / Wi-Fi konfiguratsioon / Wi-Fi-kokoonpano / Konfiguracija Wi-Fi mreže / Wi-Fi konfiguráció / „Wi-Fi” konfiguracija / Wi-Fi konfigurācija / Konfigurácia Wi-Fi / Konfiguracija Wi-Fi / Wi-Fi Yapılandırması / Configuração Wi-Fi



1 Scan the QR code to download SolaXCloud App.



2 Create a new account and follow the tutorial on the SolaXCloud APP or the App guide at <https://www.solaxcloud.com/> to set the WiFi configuration.



Or scan the QR code to watch the WiFi configuration video on YouTube.