Quick Installation Guide

—— X3-MEGA G2 20kW-60kW

SolaX POWER

I Packing List

Inverter x1

Bracket x1

Communication terminal x1

M8 Bolt x2

Female DC connector x12
Male DC connector x12

M8x80 Expansion bolt x4

AC protective shield x1

Double offset ring wrench x1

Documents

Wi-Fi (Optional)

*Note: The double offset ring wrench in the accessory box is used to remove the screws on the front cover of the inverter. Keep it in a safe place

II Mounting the inverter on the wall

- Use the bracket as a template for marking the position of holes with a level and marker.
- Drill the four holes with a Φ12 drill.
- Depth: at least 65mm.
- Hammer the M8x80 expansion screw into four holes.
- Screw in the nut firmly with socket wrench.

Expansion screw
Bracket
Nut

❶ ❷ ❸

- Lift up the inverter.
- Two methods are available by two installers or lifting ring

-Hang it onto the bracket

- Fix it on the wall bracket with M8 bolts

❹ ❺ ❻

III Mounting the inverter on the stand

- Use a bracket as a template for marking the position of the holes with a level and marker.
- Drill the four holes with a Φ10 drill.
- Screw in the corresponding screw into holes.
- Tighten the nut firmly with corresponding socket wrench.

Screw
Bracket
Nut

❶ ❷ ❸

*Note: Screws used for stand installation are not in the accessory box. Please prepare them in advance.

- Lift up the inverter.
- Two methods are available by two installers or lifting right

- Hang it onto the bracket

- Fix it on the stand with M8 bolts

❹ ❺ ❻

IV Grounding connection

- Strip the grounding cable insulation
- Select OT copper terminal

$A=B+(2\sim3mm)$

- Pull the heat-shrink tubing over grounding cable
- The tubing must be at below stripped cable section

$C=A+2\ cm$

Heat-shrink tubing

- Insert the stripped section into OT terminal.
- And crimp with crimping tool

L3 < 2 mm
L4 < 1.5 mm

❶ ❷ ❸

- Pull the heat-shrink tubing onto crimped section of OT terminal
- Use hot-air blower to shrink it so that they are in firm contact with OT terminal

L3 < 2 mm
L4 < 1.5 mm

- Connect the grounding cable to grounding point on the inverter
- Tighten it with torque 10-12 N·m.

❹ ❺

V Grid connection

- Disassemble the AC protective shield

M50X1.5 (26-32)
M50X1.5 (20-26)
M50X1.5 (16-20)

Fastening head, Blue rubber seal ring, Orange ring, Red ring, Black part, Protective shield

❶

*Note: Select the corresponding rubber seal ring in accordance with cable size used. The black part no longer used.

- Strip the 35-50 mm² AC cable insulation
  L1/L2/L3: 70±5, N/PE: 100±5
- Select OT copper terminal

100±5
70±5
15
15
Unit: mm

- Install the fastening head and AC protective shield
- And pre-tighten the fastening head

❷ ❸

*Note: The "Delta Grid" in "Setting"-"Grid Protection"- "FunctionChoose" is set as "Enable" in default.
In this condition, the Neutral wire is not required to be connected.
Please set "Delta Grid" to "Disable" before connecting the Neutral wire for the inverter.

- Pull the heat-shrink tubing over AC cable

Heat-shrink tubing

- Insert the stripped section into OT terminal and crimp with crimping tool
- Pull the heat-shrink tubing onto crimped section of OT terminal
- Use hot-air blower to shrink it so that they are in firm contact with OT terminal

L1 N
L3
L2
PE

❹ ❺

- Disassemble the five screws and connect the AC cable to the corresponding AC terminal with cross screwdriver
- Tighten the screw with torque 6 N·m.

- Loosen the fastening head and fix the AC protective shield with cross screwdriver
- Clockwise screw in the screws to fix it with 1 N·m.
- Tighten the fastening head again

❻ ❼

VI PV connection

- Disassemble the DC contactor

Positive DC contactor
Negative DC contactor

Positive PV pin
Negative PV pin

Positive terminal
Negative terminal

Fastening head
Fastening head

- Strip the PV cable insulation
6 mm

Cable size: 4-6 mm²

❶ ❷

Positive DC PV pin

Positive terminal

Negative DC PV pin

Clamp pin   (Torque: 1.2+/-0.1 N·m.)

Negative terminal

Tighten the fastening head

❸

- Connect the PV cable to the corresponding PV port

PV 2   PV 4
PV 1   PV 3

❹

❶
- Select 0.5~0.75 mm² twisted-pair and strip the 20-pin communication insulation
- Insert the insulated cord end terminal into the cable end
  (ENY0512 nylon terminal for 0.5 mm²/22 AWG conductor;
  ENY7512 nylon terminal for 0.75 mm²/20 AWG conductor)
- Clamp with terminals press clamp

20-25 mm   12-14 mm

❷
- Disassemble the communication terminal
- Set the nut, claw, seal body, seal ring and body on the cable

Body,   Seal ring,   Seal body,   Claw,   nut

❸
- Insert the tube type terminal into the housing
  according to the label
- Push the terminal-inserted housing into the body;
  you will hear "Click" , if it is correctly inserted
- Please check the following table for more details about
  corresponding Pin definition

Quick!
Click!

Housing

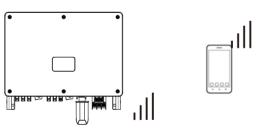| Port	Pin	Definition	Remark
RS-485-1	1	RS485A IN+	Inverter RS485 networking or connect the data collector
	2	RS485B IN-	
	3	GND	
	4	RS485A OUT+	
	5	RS485B OUT-	
	6	GND	
RS-485-2	7	RS485A METER	Connect the RS485 meter or other devices
	8	RS485B METER	
	9	+5V	
	10	GND	
DRM	11	DRM1/5	Reserved for DRM
	12	DRM2/6	
	13	DRM3/7	
	14	DRM4/8	
	15	RG/0	
	16	CL/0	
DI	21	Digital IN+	Input digital signal
	22	Digital IN-	
DO	29	Digital OUT+	Output digital signal
	30	Digital OUT-	

❹
- Push the seal body into seal ring, then push the claw
  Clockwise tighten the nut with torque 8+/-2 N·m
- Keep the buttons on both sides pressed
  and then connect it to the communication
  port on the inverter. You will hear
  "Click" if it is correctly connected

Monitoring Cloud is an application that can communicate with the inverter via WiFi/LAN/4G. It can realize alarm query, parameter configuration, daily maintenance and other functions. This is a convenient maintenance platform.

Plug Dongle into "USB" port at the bottom of the inverter. After the DC side or AC side is powered on, the APP and inverter can be connected. Please refer to the corresponding manual for details.
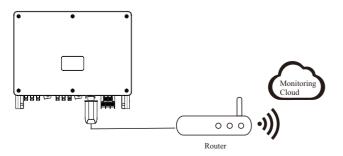
➤ WiFi connection

WiFi dongle connects to a local network within 50 m of the installation to enable access to the Monitoring Cloud platform.

Monitoring Cloud
Router

➤ LAN connection
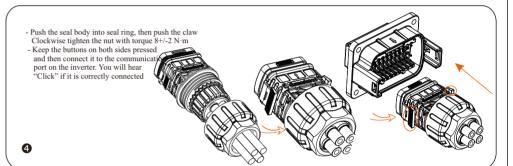
If WiFi isn't suitable, the LAN dongle enables users to connect to the network via an ethernet cable. Ethernet allows for a much more stable connection with less interference.

Monitoring Cloud
Router

➤ 4G connection

4G dongle allows you to use a 4G connection to monitor your system without the option of connecting to a local network. (This product is not available in the UK)

➤ Basic setting and advanced setting

Basic settings include the time, date and language.
Advanced settings can set Safety, System Switch, PVConnection, Active Power Control, Export Control, Reactive Power Control, Grid Voltage Parameters, Grid Frequency Parameters, Grid Through Parameters, Check Parameters, Reset, Communication Parameters and New Password.