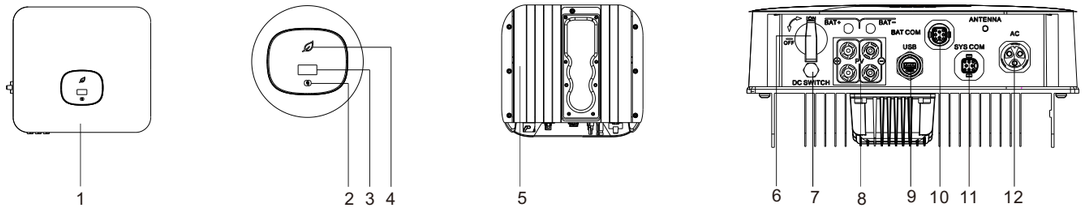
MIN 2500-6000TL-X Quick Guide

1. Overview



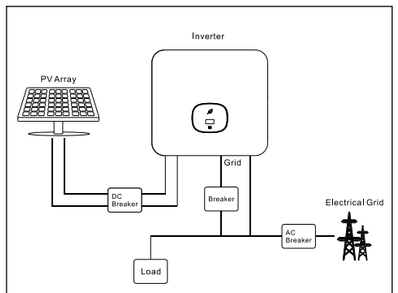
(1)Front panel	(2)Touch button	(3)OLED screen	(4)LED indicator	(5)Heat sink
(6)DC switch	(7)Vent valve	(8)PV terminal	(10)DRM port	(9)USB port
(11)RS485 port	(12)AC terminal			

⚠ Note:

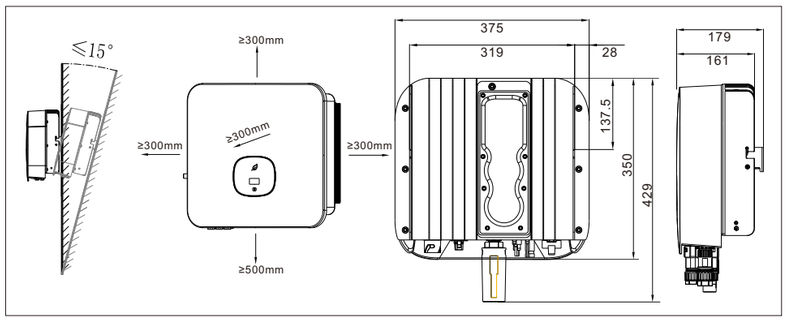
1.This document is for quick installation guidance only, please refer to User Manual for more details.
2.Growatt shall not be liable for any damage resulting from unproper installation.

2. Installation

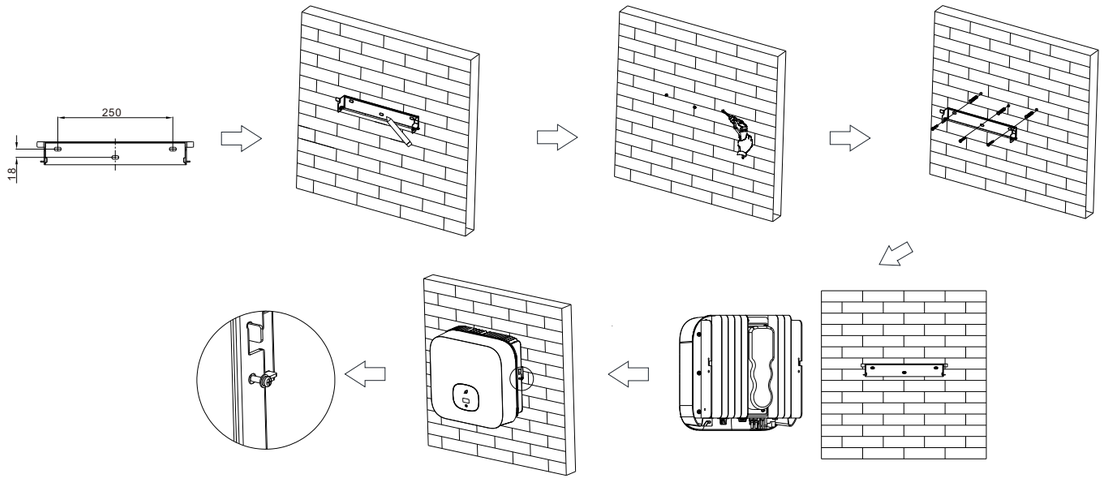
System overview



2.1 Installation requirements



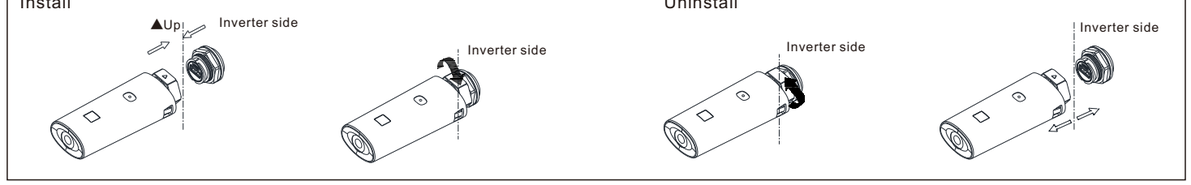
2.2 Wall mounting



⚠ Note:

1.When drilling holes in the wall, avoid water and electricity pipes, otherwise it may cause danger.

2.3 Communication module installation



3. Electrical connection

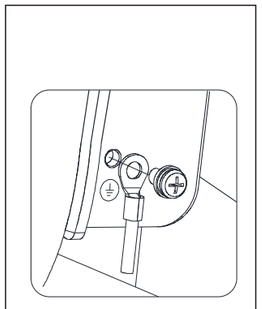
Please prepare the cable before connecting as follows.

No.	Cable name	Type	Recommend model
1	Protective grounding wire	Single multi-core yellow-green wire	6mm²
2	AC output wire	Two or three polychromatic multi-core copper wires	6mm²
3	PV input wire	PV wire (such as PV1-F)	4mm² - 6mm²
4	Communication wire	RS485	/

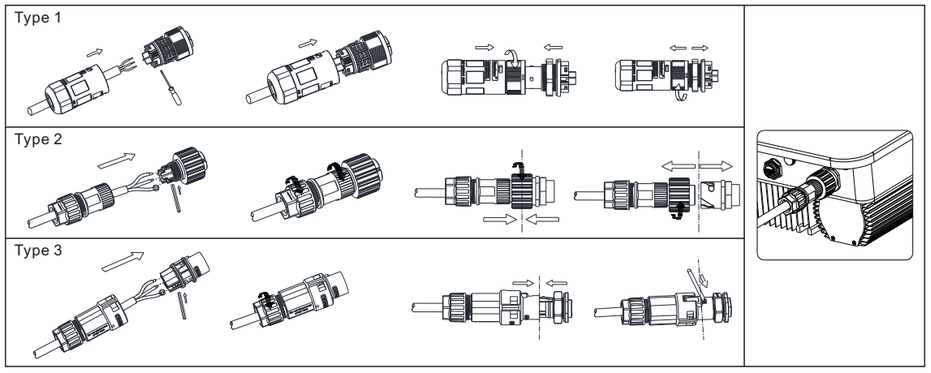
⚠ Note:

1.Please make sure all switches are in “OFF” position before wiring. For personal safety, please do not operate with electricity.
2.If the diameter of the cable does not match the terminal, or the cable is aluminum wire, please contact our after-sales personnel.

3.1 Grounding

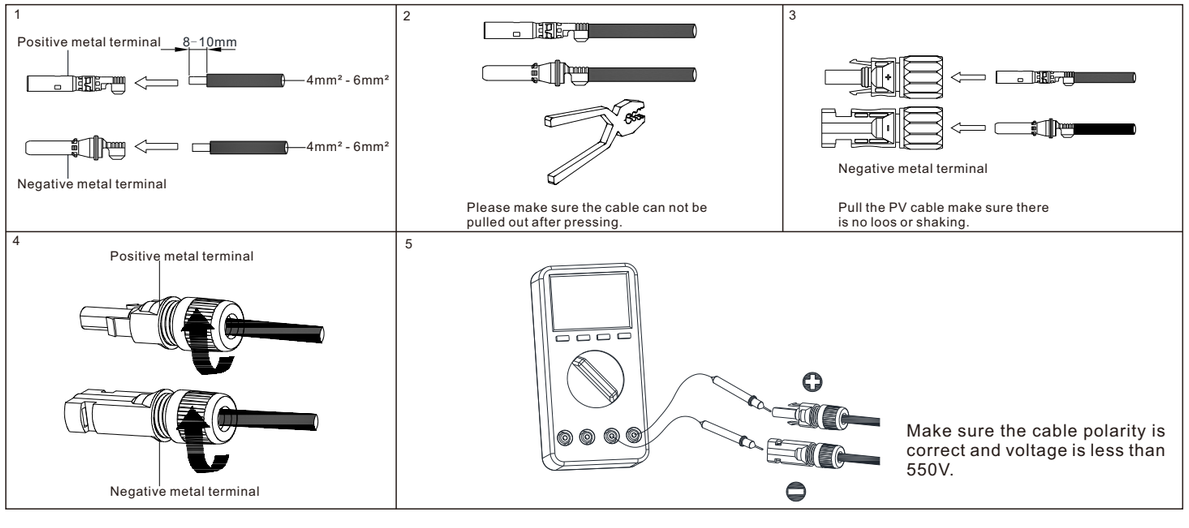


3.2 AC output connection

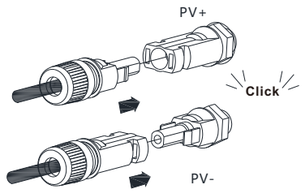
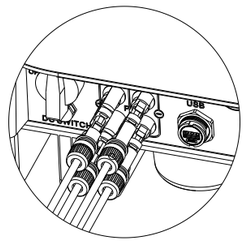


3.3 DC connection

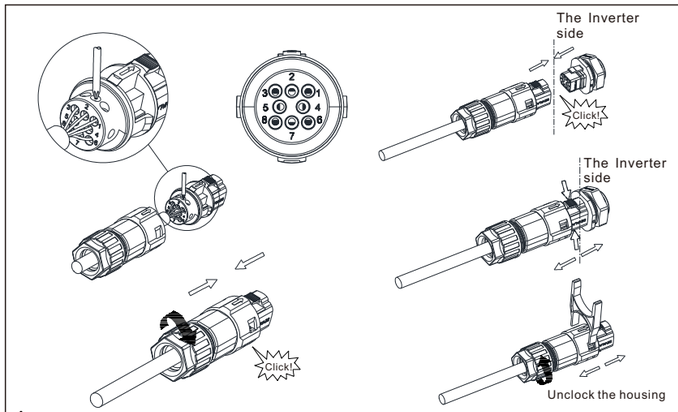
3.3.1 PV input terminal installation



3.3.2 Plug in PV terminal

1	2	Note:
		1.Before installing the PV terminal, please double-check that the PV input voltage and current do not exceed the MPPT limits. 2.When installing the PV terminal, pay attention to the difference between the positive and negative poles and the one-to-one correspondence between the terminals and the machine. 3.There is a "click" sound when the terminal is connected,please gently pulling the PV wire to make sure there is no loose or pulling off.

3.3.3 Communication cable installation



SYS COM Port Pin Definitions

No.	Definition		No.	Definition	
1	+12V	Power supply for external relay(≤2W)	5	CT-P	Signal for export limitation (Optional)
2	COM		6	CT-N	
3	RS 485A1	Signal for communication	7	RS 485A2	Signal for Smart Meter
4	RS 485B1		8	RS 485B2	

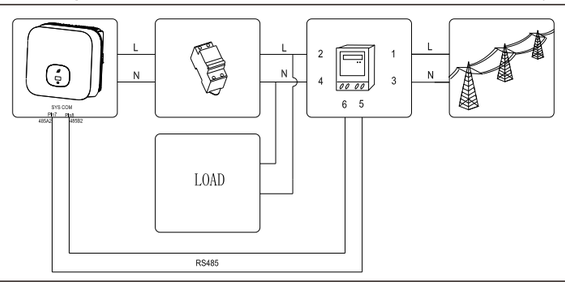
DRM Port Pin Definitions

NO.	1	2	3
Definition	DRM5	DRM6	DRM7
NO	4	5	6
Definition	DRM8	REFGEN	COM/DRM0

⚠Note:
1.When laying out signal cables, separate them from power cables to avoid strong signal interference sources
2.Do not mix the connector to the DRM COM port and the connector to the SYS port.

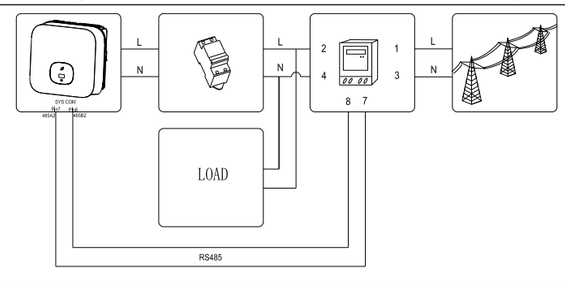
4. Connecting Meter

The following table describes how we can connect EASTRON meter (SDM230-Modbus)to inverter:



Meter Pin NO.	Description	Meter Connection
1	L-in	Grid L
2	L-out	AC connector & Load L
3	N-in	Grid N①
4	N-out	AC connector & Load N
5	RS485A	SYS COM Pin 7 RS485A2
6	RS485B	SYS COM Pin 8 RS485B2

The following table describes how we can connect CHINT meter (DDSU666) to inverter:



Meter Pin NO.	Description	Meter Connection
1	L-in	Grid L
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4	N-out	AC connector & Load N
7	RS485A	SYS COM Pin 7 RS485A2
8	RS485B	SYS COM Pin 8 RS485B2

Note:①For Australian market,installers can connect pin3 or pin4 to the neutral links/bars.

5. Post-installation check

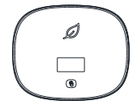
No.	Acceptance criteria	No.	Acceptance criteria
1	The inverter is installed correctly, firmly and reliably.	6	The RS485 communication cable is installed correctly and firmly.
2	The ground wire connected well and the connection is firm and reliable.	7	The cable tie port is trimmed well without leaving sharp corners,meets the requirements of the user.
3	All switches are in the OFF state.	8	All exposed terminals are well protected and there are no vacant ports.
4	All wiring is correct and securely connected.	9	Pay attention to clean up all construction residues.
5	The wiring of the cable is reasonable, meets the requirements, and there is no phenomenon of broken skin.		

6. Power on and off steps

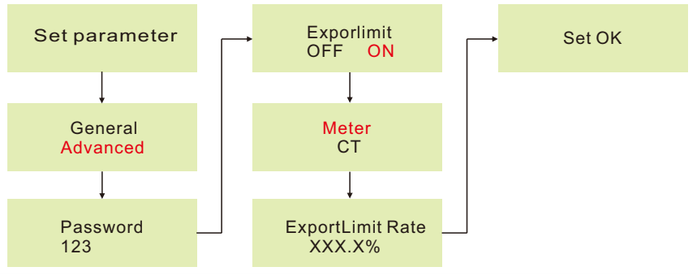
⚠Note:
Before turning the inverter on, please make sure the PV input voltage and current are within the MPPT limits.
Follow the steps below to turn the inverter on:
1.Switch on the build-in DC isolator at the bottom of the inverter.
2.Switch on the PV Array and DC isolator next to your inverter, if you can not find this switch, skip this step.
3.Switch on the Solar AC isolator if the inverter is more than 3 meters away from your switchboard.
4.Switch on the solar supply main switch in the switch board.
To shut down your system, follow this guide in reverse order

7. Status of PV grid inverter

Customer can read more information by push button.

Mark	Describe	Explain	
	Touch mark	Single touch	Switch the display interface or the current number plus 1
		Double touch	Enter the setting state or confirm
		Triple touch	Return to the previous display interface
		Long press for 5s	Confirm Country setting or Number recover default value
	Inverter status indicator	Red	Fault
		Green	Normal operation
		Red light flashing	Warning
		It can display the basic information of inverter through OLED display screen (PV/AC voltage,PV power,ACcurrent,total power,generating capacity, etc.).	

8. Export limitation setting



Under the permission given by your energy provider, the ratio of your system output power divided by the rated power of the inverter is called Export Limit Rate. For instance, if the energy provider only accepts 4kW from your 5KW system, then the Export Limit Rate of 5kW inverter is 80.0%.