

Growatt Export Limitation Guide

1. Inverter model

Inverter series list below support the export limitation function by add a Growatt meter:

Growatt 750-3000-S, Growatt 2500-5500MTL-S

Growatt 3000-6000TL3-S, Growatt 7000-11000TL3-S, Growatt 12000-15000TL3-S

Growatt 17000-25000TL3-S, Growatt 30000-50000TL3-S

Note:

1. Make sure inverter with the latest firmware version.
2. Single-phase inverter, make sure the inverter with RS485 communication port.

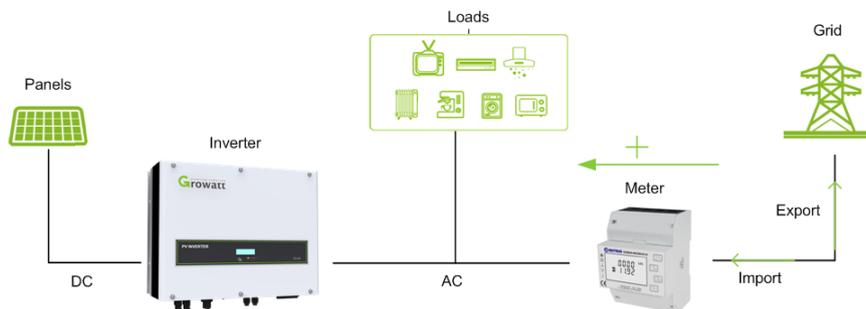
2. Meter selection

For export limitation function, only Growatt meter are approved.

1-phase meter is Growatt SPM, 3-phase meter is Growatt TPM, 1-phase meter is for single-phase system export limitation, for 3-phase system, please use Growatt 3-phase meter.

3. Meter connection

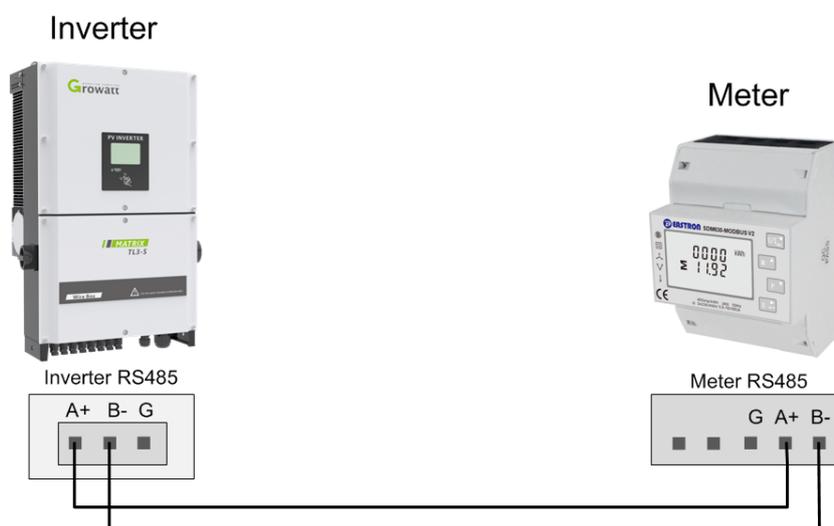
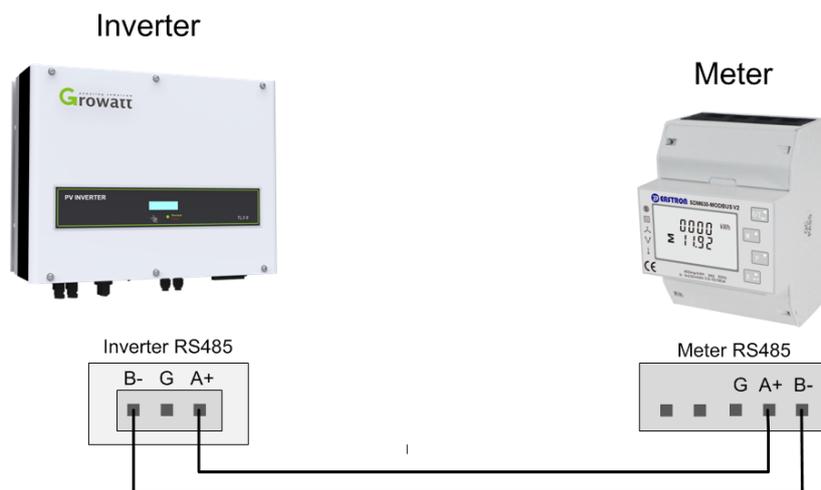
Follow the guide of direction on the meter, follow the arrows on the meter, input side connect to grid side, output connect to home load side, meter install between grid and load applications as below picture.



4. Communication with inverter

Inverter and meter communication via RS485 communication port, connect meter RS485 to inverter RS485 connector as below picture.

Note: check the RS485 ports define in the manual.



5. Configuration

Export limitation enable/disable

When enable this function, means zero export, no power export to grid.

1. Configure via ShineServer (Recommend)

If the inverter is monitored online by Growatt monitoring system, you can do the configuration via ShineServer. Login your account, click into Setting below “My Photovoltaic device”, click the “Inverter Setting” button, enter the setting page.

My Photovoltaic Devices

All Device →

Device Serial Number: [redacted] Connect Status: Lost Update Time: 2020-11-11 17:08:24 Rated Power(W): 6000
 User Name: MORONI Plant Name: moroni Data Logger: NAC3907509 Current Power(W): 0
 Today(kWh): 0 This Month(kWh): 155.5 Total Energy(kWh): 9598.8

Total 1 Item Previous 1 Next To First 1 Page Yes

Click “advance set”, select the register, and fill in 202 and value 1 as below picture, then fill in the password and click “save”, to enable this setting.

Note: Please check with Growatt service engineer for the password.

Inverter Setting

- Set Save Pf Command Off
- Set Active Power Rate 100 %
- Set Reactive Power Rate Over 255 %
- Set Pf Value (-0.8 ~ -1/0.8 ~ 1) 1.0
- Set Time 2020-11-11 06:47:15
- Set Grid Voltage High 440.0
- Set Grid Voltage Low 340.0
- Register 202 Value 1
- Set Pv On/Off Read
- Start Address Advanced Read
- End Address

Please Enter Key To Save Yes Advanced Set Cancel

2. Configure via ShineBus and Modbus Test

Local configure with laptop, use USB to RS232 cable connect the laptop to the inverter RS232 port, and open the software to do the setting.

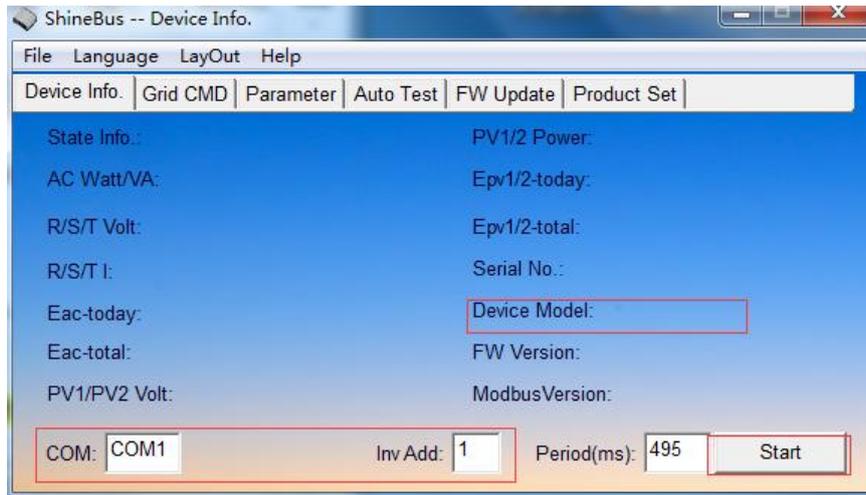
Note: Please ask Growatt service engineer for the software.

ShineBus setting the model value to enable the export limitation function.

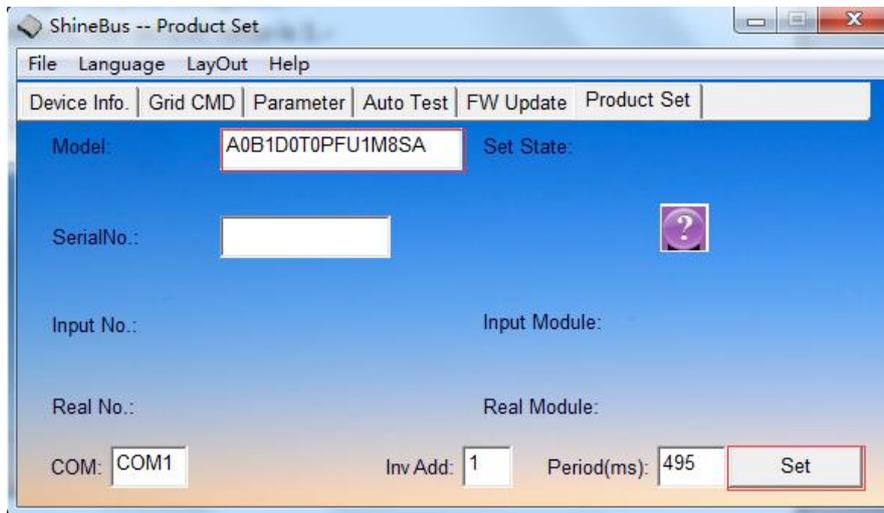
Read the inverter information first, and record the model value.

Note:

- COM number is the COM address of the USB of your laptop, you can check it in device manager on your computer.
- Inv Add is inverter address, the default value is 1.



Then in “Product Set” page, fill in Ax**B1**DxTxPFU1MxSx, only change B0 to B1 to enable export limitation function, keep others same as the model value you record, for example, if record model value is A0B0D0T0PFU1M8SA, then fill in A0**B1**D0T0PFU1M8SA, and click Set to save the setting.

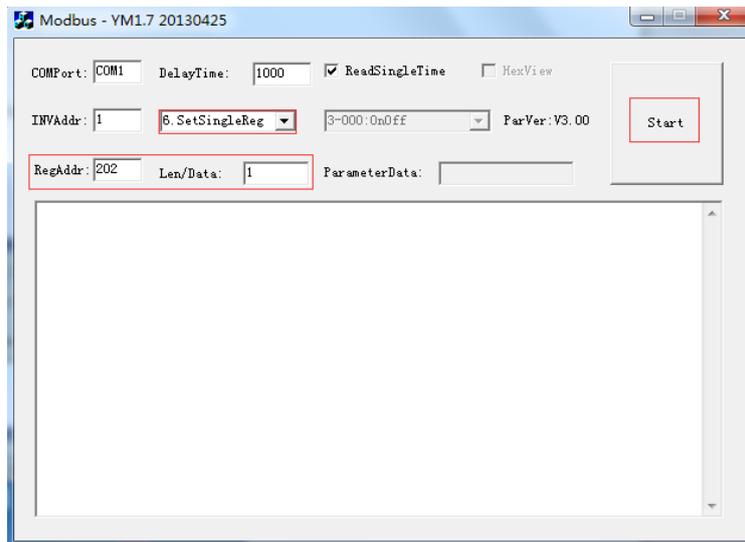


Enable the export limitation function via Modbus.

Select “6. SetSingleReg”, and fill in 202 and 1 as below picture, means set register 202 to value 1, and click “Start” to save the setting.

Note:

- a. COM number is the COM address of the USB of your laptop, you can check it in device manager on your computer.
- b. Inv Add is inverter address, the default value is 1.

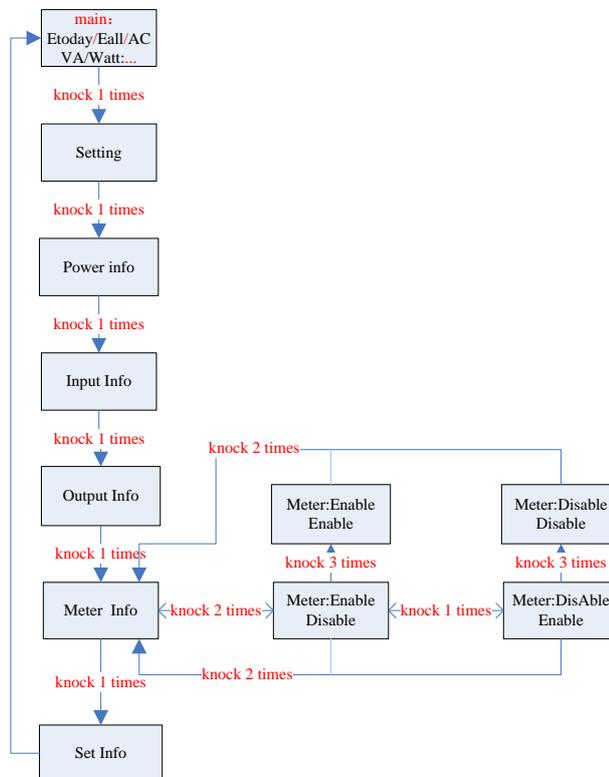


3. Configure via LCD

It's very easy to enable export control via LCD by knocking, please refer to below flow chart to do the setting. Come to "Meter Info" page, double knock to enter the Meter enable and disable page, fast knock 3 times to confirm enable it.

Note:

- a. Knock 1 times: next page
- b. Knock 2 times: exit/entry interface
- c. Knock 3 times: confirm setting information



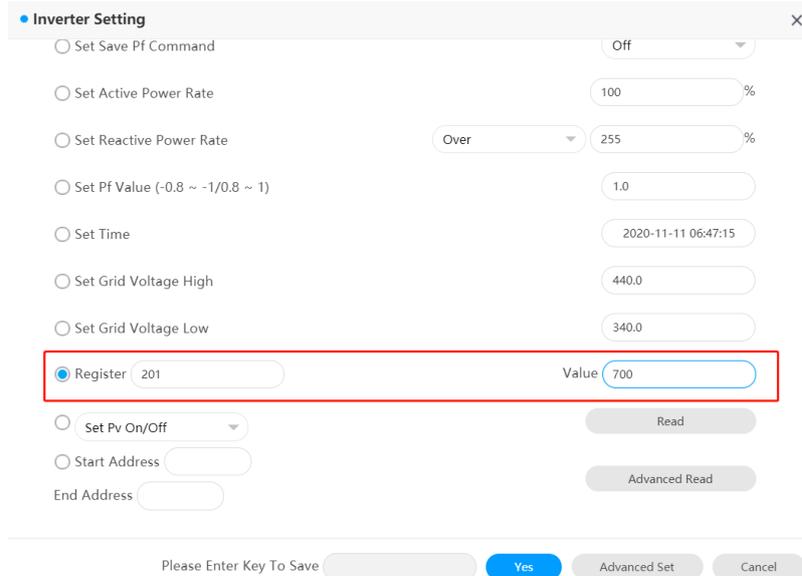
Export Power Limitation Configuration

After enable export limitation function, means zero export to grid, if allow system export certain power to grid, then you need set the export power limitation value. Export power limitation only can be set via ShineServer and Modbus Test.

1. Configure via ShinePhone APP/ ShineServer (Recommend)

In inverter setting page, click "Advance set", select "Register", fill in register 201 and the value that you want to export to grid, for example, fill in 700 means allowed system export 70% of inverter rated power to grid. Then fill in the password and click "save" to save the setting to inverter.

Note: Please check with Growatt service engineer for the password.



2. Configure via Modbus Test

Open Modbus Test software, and fill in register 201 and the value that you want to export to grid, for example, fill in 700 means allowed system export 70% of inverter rated power to grid. Then fill in the password and click "Start" to save the setting.

Note: Please ask Growatt service engineer for the Modbus Test software.

