

Growatt Smart Meter Solution

What is a smart meter?

A Growatt meter is a bidirectional meter that can help inverter optimizes self-consumption, records load curves, controls energy flows and limits the amount of energy export to grid.

Growatt meter for energy consumption monitoring*

Growatt meter allows system owners to record their energy consumption and display on Growatt free portal ShineServer and ShinePhone APP. On this portal, you can see both production and consumption data, and also the self-consumption rate. Which help give a chance to the system owner to better understand their energy usage.

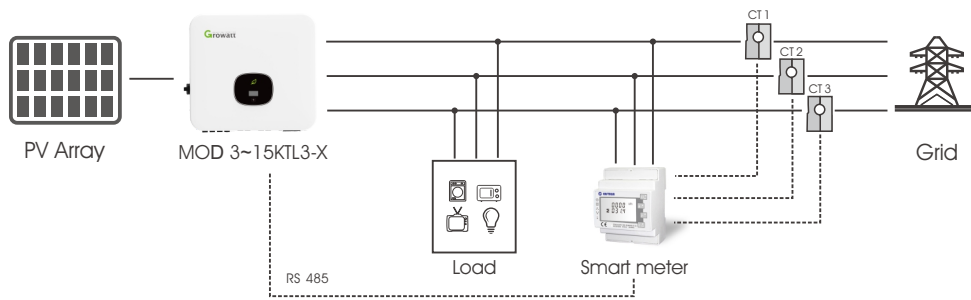
Note: Only new X series inverter support self-consumption monitoring, function available in 2020 Q4.

Growatt Meter for Export Limitation

The Growatt smart meter offers a simple and economical solution to export limitation, Growatt solution already meet G100 (UK) and UNE 217001 (Spain).

After installation of Growatt inverter and Growatt smart meter, installer can configure the system export power in percentage, this setting can be done via ShinePhone APP or via inverter LCD with button, the set range is 0-100% normal power. Installer need a special code to be able to do this setting. Please check with Growatt service engineer for details.

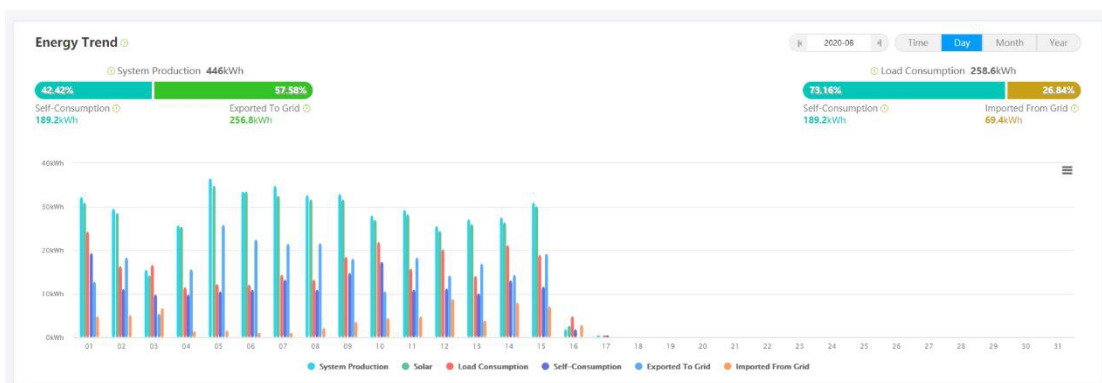
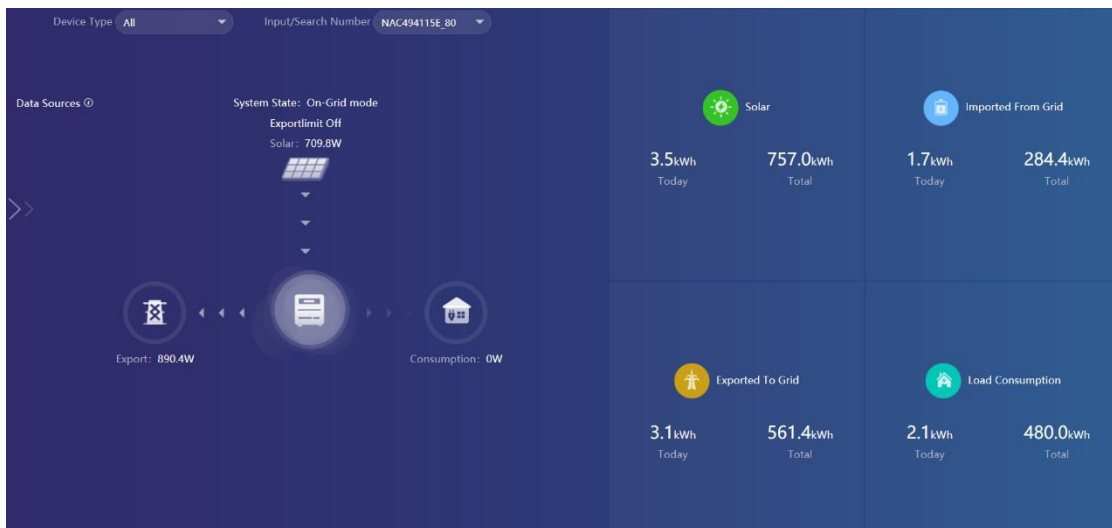
How does it work?



When install a meter at the grid-tied point, then inverter always know how much power export to grid. So when installer set the export limitation power, inverter will always control the system output power not exceed the limit value.

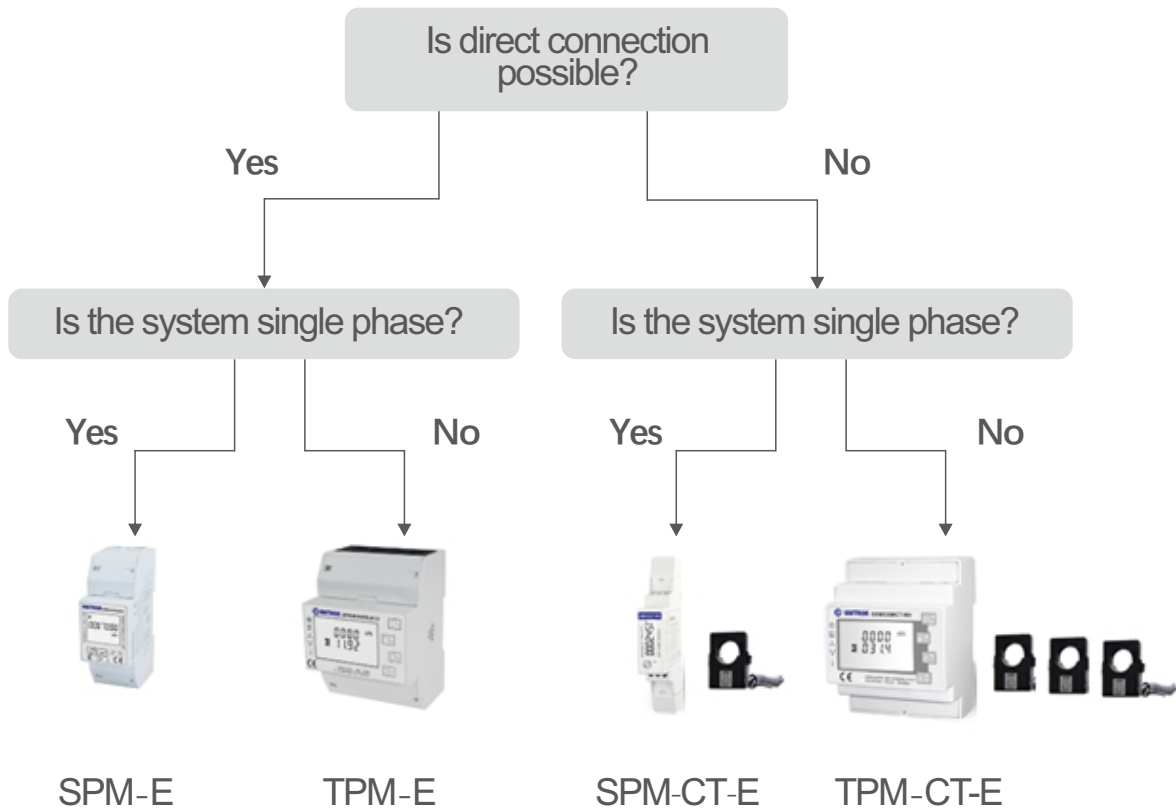
Monitoring data

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Which meter do I need?

To help you select the right smart meter, please refer to the helpful flow chart and table below:



Growatt smart meter information

| Model | SPM-E | TPM-E | SPM-CT-E | TPM-CT-E |
|--------------------------------|---------------------|-----------------|----------|-----------|
| Connection | 1P2W | 3P4W | 1P2W | 3P4W |
| Voltage range (L-N) | 176~276V | 100~289V | 176~284V | 100~289V |
| Current | 10A (max.100A) | 10A (max.100A) | 40mA | 40mA |
| Max. RS485 communication range | 100m | 100m | 100m | 100m |
| CT | / | | 1CT 100A | 3CTs 150A |
| | 250A CT is optional | | | |

Note: There is already 100A CT inside SPM-CT-E meter package, and 3pcs 150A CTs inside TPM-CT-E package. We also provide 250A CT as an optional.