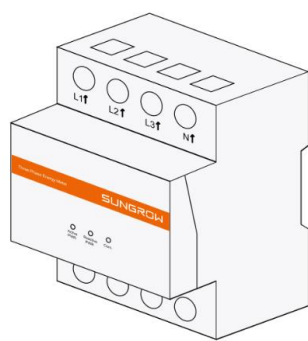


Three Phase Energy Meter (T65) – Net Export

Details of the functionality of the Sungrow Three Phase Energy Meter with NextGen Crystal inverters install in a 3 phase installation.



T65
Three-phase Smart Energy Meter

Electrical Parameter

Nominal voltage	230 Vac / 400 Vac
Input voltage range	180 Vac–286 Vac
Power consumption	< 2 W (10 VA)
Max. operating current	65 A
Grid frequency	50 Hz
Measurement accuracy	Class I
Interface and communication	RS485

Environmental Condition

Ingress protection rating	IP20
Operating ambient temperature	-25°C to 70°C
Relative humidity	0–95 %

Mechanical Data

Dimensions (W x H x D)	85 mm x 72 mm x 72 mm
Weight	0.4 kg
Installation	35 mm DIN-rail

Figure 1 Sungrow Three Phase Energy Meter (T65) Data

The Sungrow Three Phase net meter has been introduced to assist with self-use functionality in 3 phase systems which have a network installed net meter.

Traditionally, export control has been done with a single-phase meter. As the single-phase energy meter only monitors the one phase, it does not take into account the import/export on the other two phases. In certain circumstances, this may result in the inverter ramping down it’s output to reduce export, even when there is import on the other two phases.

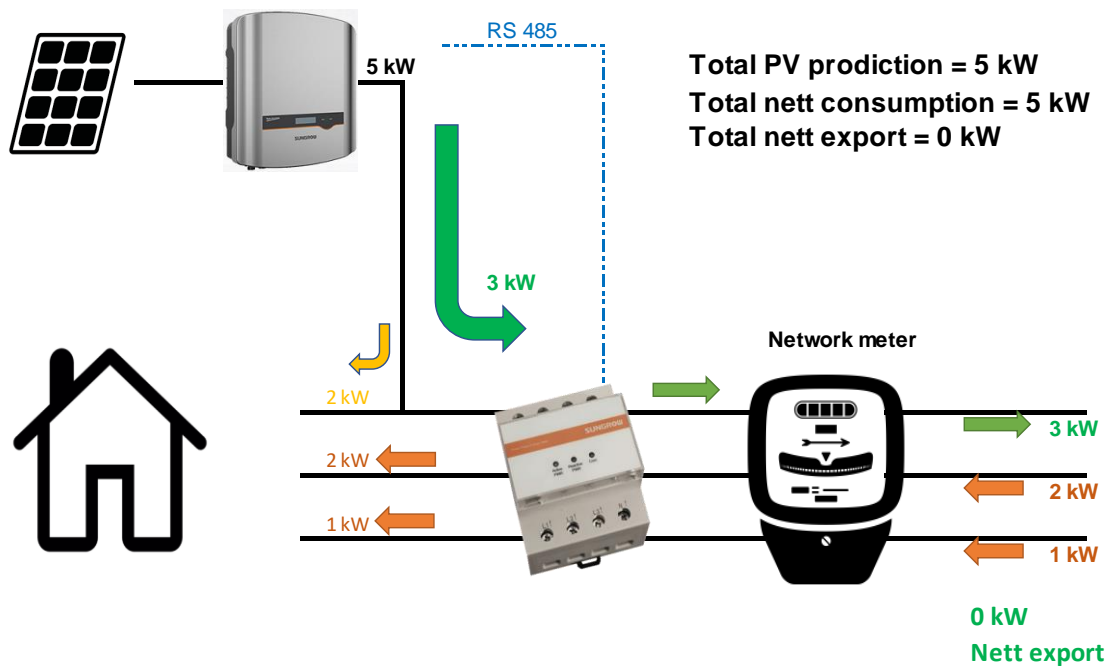
The new 3 Phase meter acts as a net meter, like the network meter, and will take import on the other two phases into account, making the system more efficient.

In the below example, the inverter is producing 5 kW and the consumption is 2 kW on the same phase. The house is consuming 2 and 1 kW respectively on the other two phases. A total of 5 kW consumption.

If for example, the net phase export was limited to 0 kW, a single-phase meter would ramp down the output of the inverter to 2 kW because it would only see what's exporting on that particular phase.

But with the 3-phase meter as shown below, the other phases have been considered and the inverter continues to run at full power, allowing self-use on the other two phases i.e. the system is producing 5 kW and effectively supplying the house total load across all phases of 5 kW.

Sungrow 3 phase net metering allows self use in a 3 phase system.

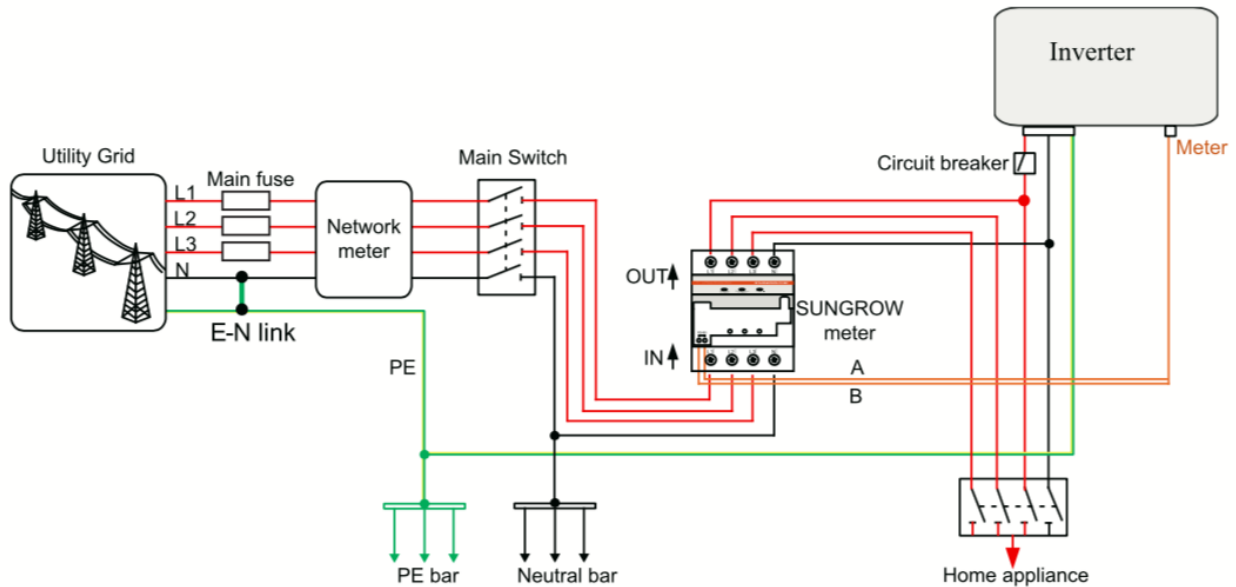


Diverts nett energy to loads to increase self use
 Will not ramp down inverter until nett export limit reached

The above represents considerable savings for the customer.

Overview of the Energy Meter Installation

The following figure shows a connection example for the three-phase system.
 Electrical Connection for Applications < 65 A :



※ The E-N link connection only applies to Australia and New Zealand.

Click [here](#) to access the quick manual how to install Sungrow 3 phase energy meters.

Please contact Sungrow service team on 1800 SUNGROW (786 476) or email us via service@sungrowpower.com.au if further information is needed.