

# Sungrow Energy Meter Selection Guide

The Sungrow Energy Meter presents a clear overview of energy consumption in combination with Sungrow iSolarCloud. The Sungrow Energy Meter is ideally suited for use with the Sungrow single-phase inverters and three-phase string inverters.

Type	Inverter type of application	CT requirement
<b>S100</b>	SG2/2.5/3K-S, SG3/5/8K-D, SH5K-20, SH5K-30	No, S100 itself owns CT.
<b>DTSU666</b>	SG2/2.5/3K-S, SG3/5/8K-D, SH5K-20, SH5K-30, SG5/10KTL-MT, SG15/20KTL-M, SG30CX, SH5.0/8.0/10RT	No, this meter integrated CT inside.
<b>T65</b>	SH5.0/8.0/10RT	No, this meter integrated CT inside.
<b>DTSD1352-C/1(6)A</b>	SG30CX*, SG50CX, SG110CX.  * only applicable for the phase current > 80A	Yes, Sungrow meters are compatible with CTs as below:  <b>IPD CTME-3 Series for Single Turn Primary</b> a. 150A, CTME3150 b. 200A, CTME3200 c. 300A, CTME3300 d. 400A, CTME3400 e. 500A, CTME3500  <b>SOCOMEK TCA 21/TCA14 SERIES</b> a. 75A, TCA21-75/5 b. 80A, TCA21-80/5 c. 100A, TCA21-100/5 d. 125A, TCA21-125/5 e. 150A, TCA21-150/5 f. 200A, TCA21-200/5  <b>SOCOMEK TCB 18 - 20 SERIES</b> a. 100A, 192T3310 b. 150A, 192T3315 c. 200A, 192T3320 d. 250A, 192T3325

Above CTs are only recommended for customers. Customers also can select the CTs by themselves.

## Selection criteria for choosing the CT's:

### · Primary current

The CT's primary current should be equal to or greater than the maximum expected AC current from the grid, per phase. The closer the expected AC current is to the chosen primary current value, the more precise the measurement will be.

### · Secondary current

5 A

### · Accuracy class

Class 0.5 or better (Class 0.2, etc.) is recommended. Class 0.5 is equivalent to a deviation of  $\pm 0.5\%$  of the secondary current at maximum power.

## S100 Single-phase Smart Energy Meter



Type designation	S100
<b>Electrical Parameter</b>	
Nominal voltage	240 Vac
Input voltage range	180 Vac - 286 Vac
Power consumption	<2W (10 VA)
Max. operating current	100 A
Grid frequency	50 Hz
Measurement accuracy	Class 1
Interface and communication	RS485
<b>Environmental Condition</b>	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 75 °C
Relative humidity	0 - 95 %
<b>Mechanical Data</b>	
Dimensions (W * H * D)	18 * 117 * 65 mm
Weight	0.2 kg
Installation	35 mm DIN-rail

## T65 Three-phase Smart Energy Meter



Type designation	T65
<b>Electrical Parameter</b>	
Nominal voltage	230 Vac / 400 Vac
Input voltage range	180 Vac - 286 Vac
Power consumption	<2W (10 VA)
Max. operating current	65 A
Grid frequency	50 Hz
Measurement accuracy	Class 1
Interface and communication	RS485
<b>Environmental Condition</b>	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 70 °C
Relative humidity	0 - 95 %
<b>Mechanical Data</b>	
Dimensions (W * H * D)	85 * 72 * 72 mm
Weight	0.4 kg
Installation	35 mm DIN-rail

## DTSU666 Three-phase Smart Energy Meter



Type designation	DTSU666
<b>Electrical Parameter</b>	
Nominal voltage	230 Vac / 400 Vac
Input voltage range	57.7 / 100 Vac - 265 / 460 Vac
Power consumption	< 1.5W (6 VA)
Max. operating current	80 A
Grid frequency	50/60 Hz
Measurement accuracy	Class 1
Interface and communication	RS485
<b>Environmental Condition</b>	
Ingress protection rating	IP20
Operating ambient temperature	-30 °C - +60 °C
Relative humidity	75 %
<b>Mechanical Data</b>	
Dimensions (W * H * D)	72 * 65* 100 mm
Weight	0.4 kg
Installation	35 mm DIN-rail

## DTSD1352-C/1 (6)A\* Three-phase Smart Energy Meter



Type designation	DTSD1352-C/1 (6)A
<b>Electrical Parameter</b>	
Nominal voltage	230 Vac / 400 Vac
Input voltage range	57.7 / 100 Vac - 268 / 464 Vac
Power consumption	<2W (10 VA)
Max. operating current	3×1 (6) A (via CTs)
Grid frequency	50 Hz / 60 Hz
Measurement accuracy	Class 0.5 (Active)
Interface and communication	RS485
<b>Environmental Condition</b>	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 55 °C
Relative humidity	0 - 95 %
<b>Mechanical Data</b>	
Dimensions (W * H * D)	126 * 91 * 74 mm
Weight	0.35 kg
Installation	35 mm DIN-rail

\* DTSD1352-C/1 (6)A needs to be used with CT externally.