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
S100	SG2/2.5/3K-S, SG3/5/8K-D, SH5K-20, SH5K-30	No, S100 itself owns CT.
DTSU666	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.
T65	SH5.0/8.0/10RT	No, this meter integrated CT inside.
DTSD1352-C/1(6)A	SG30CX*, SG50CX, SG110CX. * only applicable for the phase current>80A	Yes, Sungrow meters are compatible with CTs as below: **IPD CTME-3 Series for Single Turn Primary** a. 150A, CTME3150 b. 200A, CTME3200 c. 300A, CTME3300 d. 400A, CTME3400 e. 500A, CTME3500 **SOCOMEC TCA 21/TCA14 SERIES** 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 **SOCOMEC TCB 18 - 20 SERIES** 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 ± 0.5% of the secondary current at maximum power.

S100 Single-phase Smart Energy Meter

Type designation	S100
Electrical Parameter	
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
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 75 °C
Relative humidity	0 - 95 %
Mechanical Data	
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
Electrical Parameter	
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
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 70 °C
Relative humidity	0 - 95 %
Mechanical Data	
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
Electrical Parameter	
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
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-30 ℃ - +60 ℃
Relative humidity	75 %
Mechanical Data	
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
Electrical Parameter	
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
Environmental Condition	
Ingress protection rating	IP20
Operating ambient temperature	-25 to 55 °C
Relative humidity	0 - 95 %
Mechanical Data	
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.