ENERGY METER





DDSU666 5(80)A
DTSU666 5(80)A
DDSU666-CT 200A/5A
DTSU666-CT 200A/5A

Features

Accurate
- Class 1 measurement accuracy

Convenience
- Optional 35mm DIN rail or front mounting

Energy Saving
- Overall power consumption ≤1 W

Safe & Reliable
- Fuse-free design forsuperior safety
- International authoritative certification, more reliable
- Natural cooling fully sealed design for better reliability

Smart Energy
- Use clean, efficient renewable energy without pollution.
- Green and low carbon, saving economy, sustainable development

Smart Monitoring
- One terminal can control multiple devices, and perform parameter monitoring and fault query

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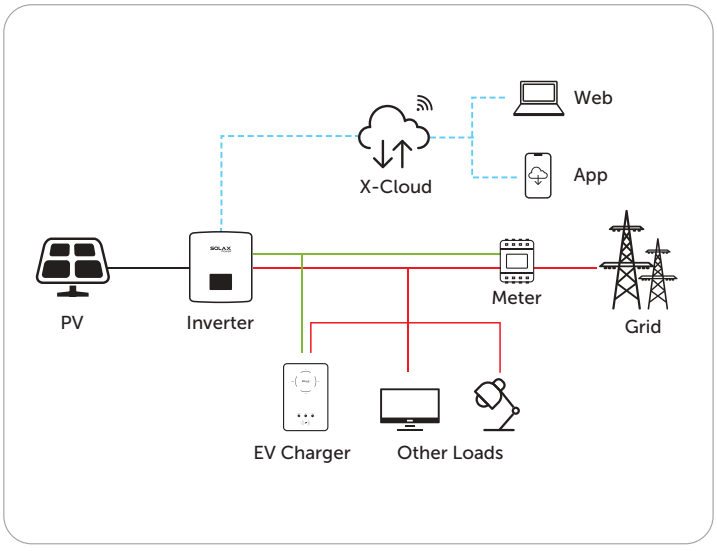
For more information, please contact us

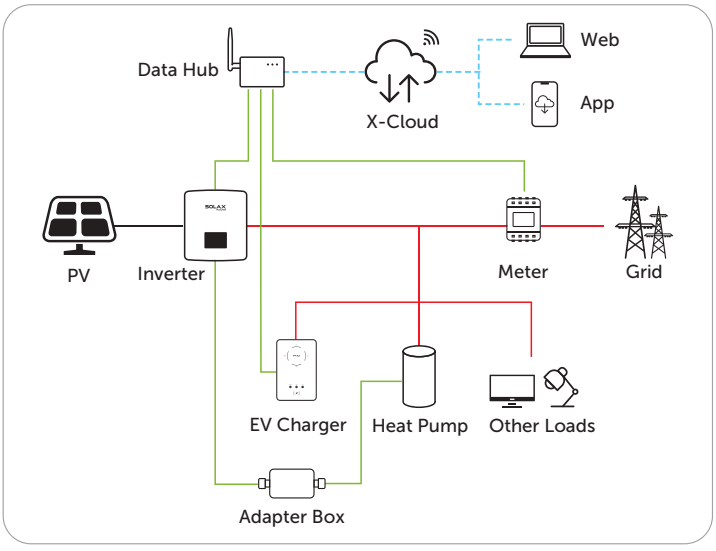
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	DDSU666 5(80)A	DTSU666 5(80)A	DDSU666-CT 200A/5A	DTSU666-CT 200A/5A
General Data				
Dimension (H xW xD)	100 x 36 x 65.5 mm (3.9 x 1.4 x 2.6 inch)	100 x 72 x 65.5 mm (3.9 x 2.8 x 2.6 inch)	100 x 36 x 65.5 mm (3.9 x 1.4 x 2.6 inch)	100 x 72 x 65.5 mm (3.9 x 2.8 x 2.6 inch)
Mounting type	DIN35 Rail			
Weight (including cables)	1.2 kg (2.6 lb)	1.5 kg (3.3 lb)	1.2 kg (2.6 lb)	1.5 kg (3.3 lb)
Power Supply				
Power grid type	1P2W	3P4W/3P3W	1P2W	3P4W/3P3W
Input voltage (phase voltage)	184Vac ~ 264.5Vac	154 Vac ~ 286 Vac	184Vac ~ 264.5Vac	154 Vac ~ 286 Vac
Power consumption	≤1 W	≤1.5 W	≤1 W	≤1.5 W
Measurement Range				
Line voltage	/	290.5 Vac~ 539.5 Vac	/	290.5 Vac~ 539.5 Vac
Phase voltage	184Vac ~ 264.5Vac	168 Vac ~ 312 Vac	184Vac ~ 264.5Vac	168 Vac ~ 312 Vac
Current	0.25-5(80)A	0.25-5(80)A	0.015-1.5(6)A (CT: 200A)	0.015-1.5(6)A (CT: 200A)
Measurement Accuracy				
Accuracy Class	Class B	Class B	Class C	Class C
Communication				
Interface	RS485			
Baud rate	9,600 bps			
Communication protocol	Modbus-RTU			
Environment				
Operating temperature range	-25°C~+55°C	-10°C~+45°C	-25°C~+55°C	-10°C~+45°C
Storage temperature range	-25°C~+55°C	-25°C~+75°C	-25°C~+55°C	-25°C~+75°C
Operating humidity	<75 % non condensing			
Others				
Accessories	RS485 Cable (10 m / 33 ft.), RJ45 connector			
	/	/	1 CT 200A/5A (1m)	3 CT 200A/5A (1m)

Solutions

DC —— AC —— RS485 —— Internet ----------





CT Optional

Model	LCTA97C2	LCTA97C4	ESCT-B812
Ratio	200A/5A	600A/5A	1500A/5A

*V1.2. Information may be subject to modify without notice.650.00033.00



Smart Meter
DDSU666-CT / DTSU666-CT
User Manual

2 Product Overview

2.1 Introduction

Smart Meter is suitable for use in electric power systems such as distributed PV systems, energy storage stations and more. It can be connected to electric power devices to monitor the power and meter the energy, allowing you to grasp the power status and regulate the power flow of the system at all times.

2.2 Highlights

- Easy installation and parameter setting

  Features a small size and convenient DIN rail mounting that occupies little space, and supports setting parameters simply through the buttons.

- Accurate measurement and clear display

  Measures voltage, current, positive and negative power, and other parameters with precision, and displays the data on the wide LCD in real time.

- High security and compatibility

  CE, RCM and CPA certified, and is compatible with multiple electric devices that cover a wide range of application scenarios.

2.3 Dimensions

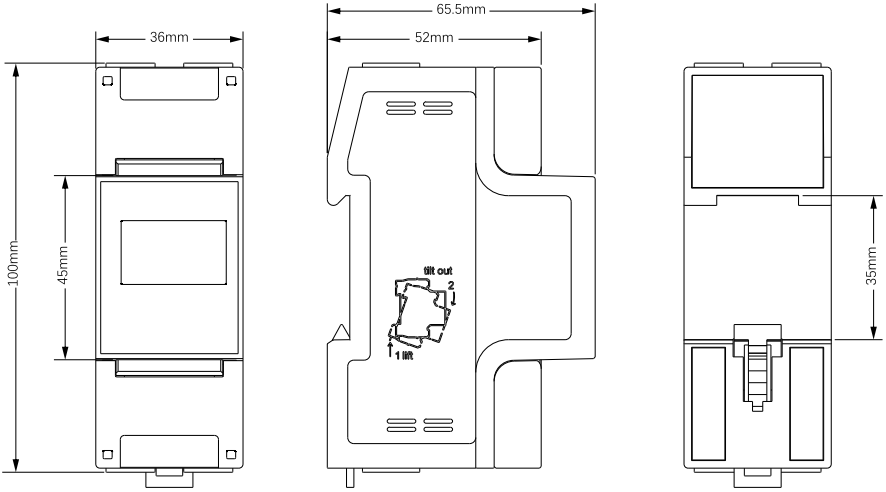


Figure 2-1 DDSU666-CT

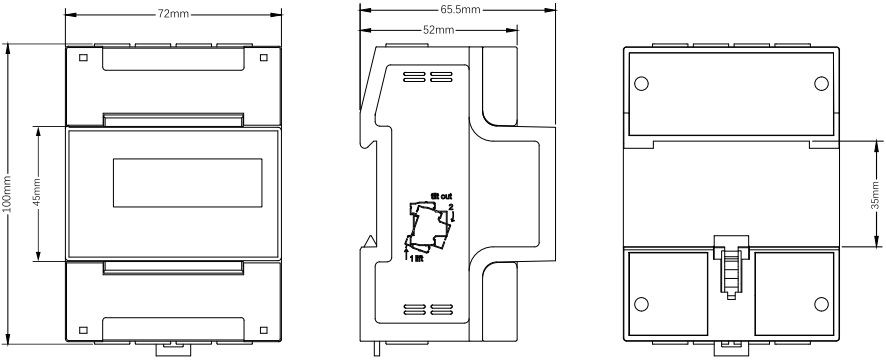
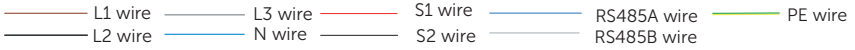


Figure 2-2 DTSU666-CT

DTSU666-CT

DTSU666-CT supports 3-phase 4-wire (3P4W) and 3-phase 3-wire (3P3W). For 3P3W, N wire does not need to be connected, and CT is not required for phase B. The overall system wiring diagrams use 3P4W wiring method for example.



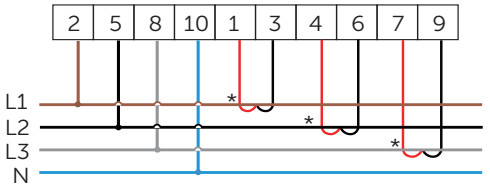


Figure 3-6 3P4W wiring mode

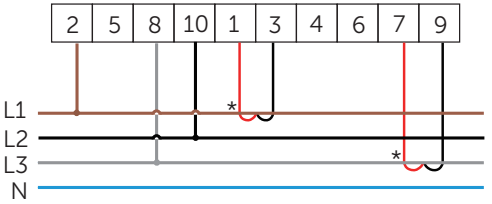


Figure 3-7 3P3W wiring mode

Note: * represents the incoming side of current.

7 Technical Data

Table 7-1 Specification

	DDSU666-CT	DTSU666-CT
Power grid type	1P2W	3P4W/3P3W
Rated voltage	220 V/230 V	3 × 230 V/400 V
Input voltage (phase voltage)	176 Vac ~ 264 Vac	161 Vac ~ 276 Vac
Current	0.05—1.5 (6) A	
Power Consumption	≤1 W	≤1.5 W
Measurement accuracy class	Class B	
Frequency	50 Hz/60 Hz	
Baud rate	9600 bps (Default)	
Communication terminal	1 × RS485	
Communication protocol	Modbus-RTU	
Operating temperature	-40°C to +70°C	
Operating humidity	≤75% (Non-condensing)	
Accessories	RS485 cable (10 m), RJ45 connector	
	1 × CT 200 A/5 A	3 × CT 200A/5A (Optional)

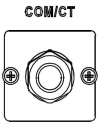
9 Appendix

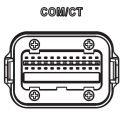
9.1 Compatible Inverters and Pin Definition

DDSU666-CT

DDSU666-CT can only be connected to single-phase inverters. It is compatible with the following single-phase inverters. While connecting the cables, pay special attention to the connector type and the pin number of the inverter.

Table 9-1 Compatible Inverters and pin definition

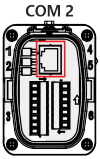
Inverter series	Terminal type	Connector type	Pin No.	Pin definition	Remarks
X1-HYB LV		RJ45	4 5	485A 485B	Select either COM1, COM2 or COM3
X1-AC		RJ45	7 8	485A 485B	—
• X1-HYB G4 • X1-FIT G4 • X1-IES		RJ45	4 5	485A 485B	—
• X1-MINI G4 • X1-BOOST G4		RJ45	4 5	485A 485B	—

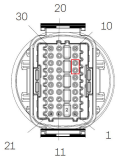
X1-SMART G2		Quick-connect terminal	4 / 11	485A	—
			5 / 12	485B	

*Note: Two terminals of different types are available for meter on X1-Smart G2, and the pins in the same box are a pair.

DTSU666-CT

DTSU666-CT can be connected to both single-phase and three-phase inverters. Therefore, besides the above the single-phase inverters, it is also compatible with the following three-phase inverters.

Inverter series	Terminal Type	Connector type	Pin No.	Pin definition
• X3-HYB G4 • X3-FIT G4 • X3-IES	 Meter/CT	RJ45	4	485A
			5	485B
X3-ULTRA		RJ45	4	485A
			5	485B
X3-MIC G2		RJ45	4	485A
			5	485B

X3-PRO G2		O/I terminal	5	485A
			6	485B
• X3-MEGA G2 • X3-FORTH		Quick-connect terminal	7	485A
			8	485B

9.2 Optional CT Models

The included CT model for both DDSU666-CT and DTSU666-CT is NCTK24 200A/5A. DDSU666-CT does not support other CT models. DTSU666-CT supports the following CT models.

Configuration	CT Model	Specification	Current Ratio
Included	NCTK24 200A/5A	200A/5A	40
Optional	SCT-36 Split Core 400/5	400A/5A	80
	SCT-36 Split Core 600/5	600A/5A	120
	ESCT-B812 1500A/5A	1500A/5A	300
	CTSB0512 2000A/5A	2000A/5A	400

If you need to purchase any of the optional CT models for your meter, contact the distributor for detailed information.