

DDSU666 Single phase electronic energy meter user manual

1. Overview of products

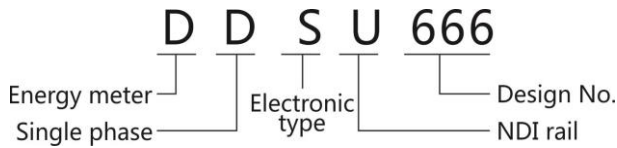
1.1 Applicable range

The DDSU666 meter mainly applied into the measurement and display for the photovoltaic system parameters in the electric circuit including voltage, current, power, frequency, power factor, active energy, etc. The network can be realized through RS485 communication interface and external device. Adopting the standard DIN35mm din rail mounting and modular design, it is characterized with small volume, easy installation and easy networking.



1. Overview of products

1.2 Specification for product model



1.3 Outline & Mounting Dimension

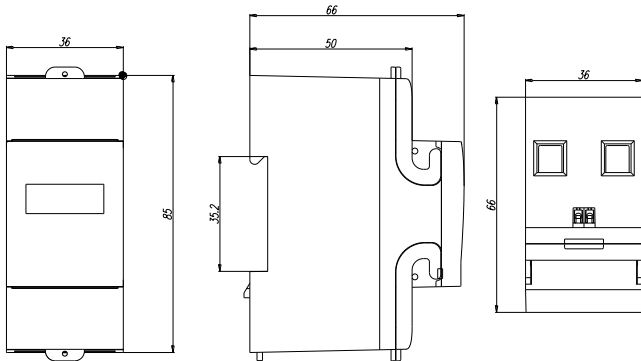


Figure 1.1 Configuration

2. Datasheet

Type	DDSU666
Electrical Characteristics	
Application	Single phase
Nominal Voltage[V]	220,230,240
Operating range	0.7~1.2Un
Max. Current [A]	80
Frequency/Range [Hz]	50,60/±5
Power Consumption[W]	≤1
Max. Instant Consumption [VA]	≤5

Physical Parameters	
Display	LCD
Communication	RS485
Operating Temperature Range	-40 °C~60 °C
Ambient Humidity	0-95% Non-condensing
Ingress Protection	IP54
Installation method	mounting rack
Dimensions[H*W*D][mm]	98*36*65
Weight [kg]	0.2
Applicable Standard	CE, RoHS

3. Instructions for installation

3.1 Check the Package

Check whether the product shell in the carton is damaged, if is, please contact the supplier

3.2 Installation

Directly clip the instrument on the rail and install it on the distribution box.

(1)When installing, firstly clip one terminal of the slot and then clip to the rail with power. (standard DIN35mm)

(2)When disassembling, press the movable card with a screwdriver and take out the instrument.

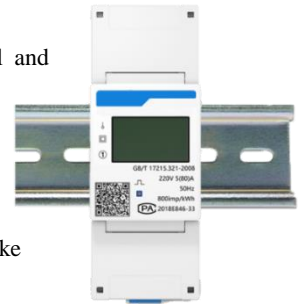


Figure 3.1 Meter installation

3.3 Instruction of wiring terminal

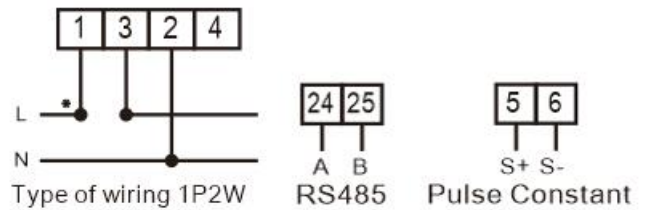


Figure 3.2 Direct connection

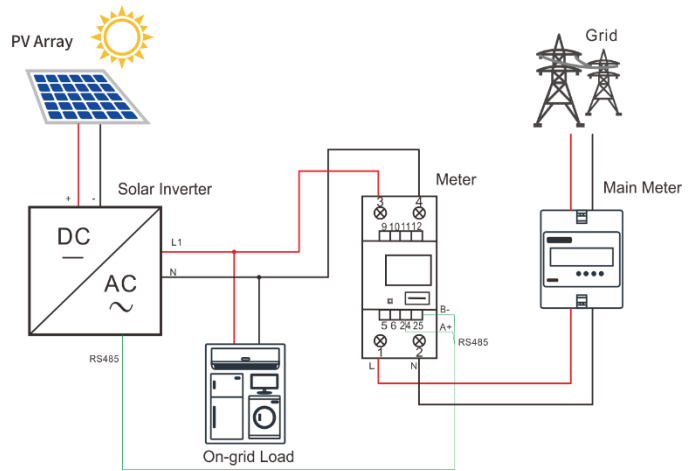


Figure 3.3 Meter connection diagram

3.4 RS485 interface of inverter

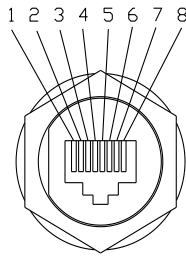


Figure 3.4 RS485 pin

PinNumber	Description	Effect
1	NC	
2	GND_W	Ground wire
3	+7V_W	Power supply
4	NC	
5	NC	
6	NC	
7	RS485-A	Transmission RS485 differential signal
8	RS485-B	

Table 3.1 RS485 pin port definition

4. Fault and troubleshooting

Fault phenomenon	Analysis of causes	Troubleshooting	Remark
Display fault	The wiring may not be connected according to the wiring diagram of the meter	Check if the actual connection is the same as the requirement of the wiring diagram. Pay special attention to “N” position of the voltage, the high & low end of the current and terminal labeling are different from actual number.	While checking the connection, be sure the meter is in the state of disconnection, guarantee the safety of human life.
Communication fault	The communication setting information of the meter may be incorrect	Check if the communication setting information such as communication address, baud rate, verification mode is the same as the PC settings.	

5. Displayed functions

When the energy meter is in normal working condition (on load state), the positive pulse indicator should be flashed. If long time for no flashing or light for the indicator, please check whether the wiring mode of the energy meter is right or not.



Table 5.1 LCD logo meanings

Symbol	Meaning
V	The unit of the voltage, the display data of indicating LCD is voltage
A	The unit of the current, the display data of indicating

	LCD is current
W	The unit of the active power, the display data of indicating LCD is active power
var	The unit of the reactive power, the display data of indicating LCD is reactive power
Hz	The unit of the frequency, the display data of indicating LCD is frequency
kWh	The unit of the active energy, the display data of indicating LCD is active energy

6. Export limitation function setting

The steps for matching R5 series inverters are as follows:

(1) Download eSolar O&M APP

Web to eSolar website <https://fop.saj-electric.com> to scan the QR code and download “eSolar O&M” APP (or download it from Google Play or App Store by searching “eSolar O&M”). After the installation on your phone, please login it with your installer account.

(2) Log in APP → Click “My” → Click “Remote control” → Click “WiFi” / “Bluetooth” → Click “Next step”. as shown in Figure 6.1. Please refer to WiFi/GPRS/4G module manual for detailed connection operation.

(3) Enter “local connect” page and select “Export limitation setting” → input password: 201561 as shown in Figure 6.2.



Figure 6.1 Local connect

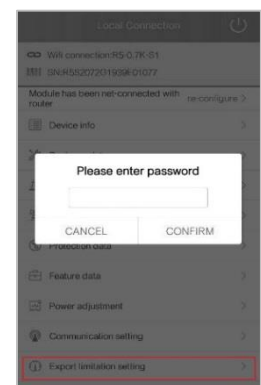


Figure 6.2 Export limitation setting

(4) Turn on “export limitation”, Wait for 15s countdown seconds to set successfully, supply the power mode and current mode, as shown in Figure 6.3 and Figure 6.4

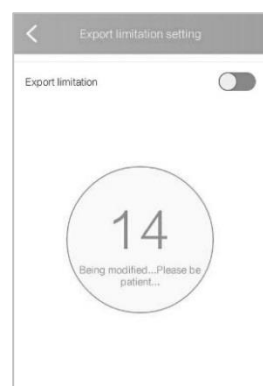


Figure 6.3 Countdown interface

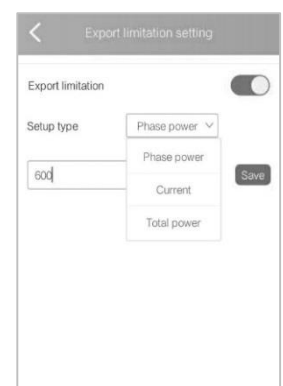


Figure 6.4 Power limit/Current limit setting

Note:

1. Power mode and current mode could be alternatively selected;
2. The setting parameter cannot exceed the given range value
3. When the setting is completed, the export limitation system will begin to run.