

DDSU666 Single phase electronic energy meter user manual

| | |
|-----------------------|---------------|
| Installation method | mounting rack |
| Dimensions[H*W*D][mm] | 98*36*65 |
| Weight [kg] | 0.2 |
| Applicable Standard | CE, RoHS |

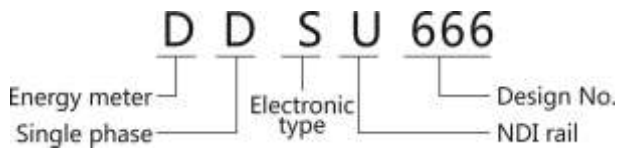
1. Overview of products

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

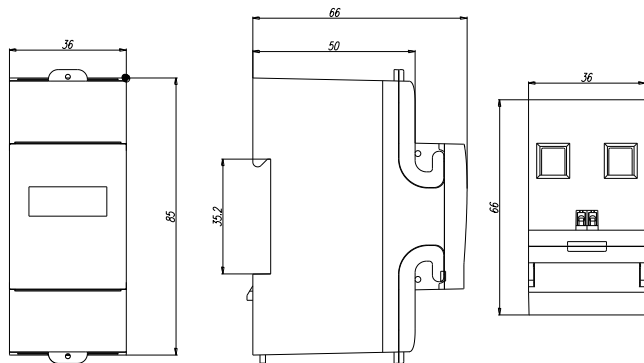


Figure 1.1 Configuration

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 |

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

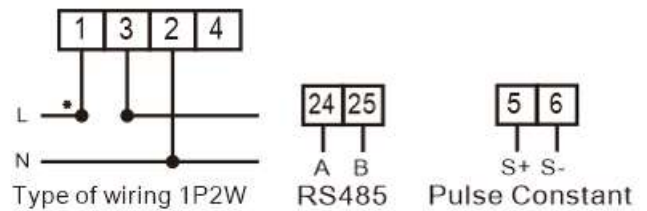


Figure 3.2 Direct connection

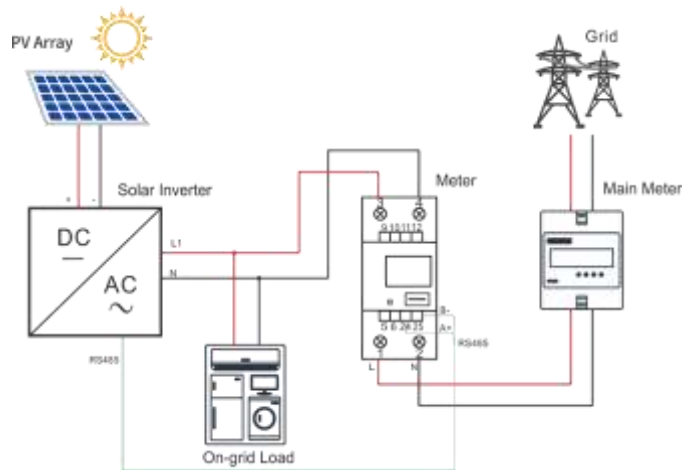


Figure 3.3 Meter connection diagram

3.4 RS485 interface of inverter

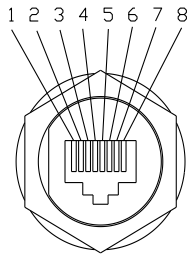


Figure 3.4 RS485 pin

| 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 Figure6.1. 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 Figure6.2.



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 Figure6.3 and Figure6.4



Figure6.3 Countdown interface



Figure6.4 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.