


# Single-Phase Meter Quick Installation Guide

## 1. Introduction

Meter has two type: direct connection type and CT connection type, below are the basic information of these two type meters:

Type	Model	Appearance	Reference Voltage	Frequency	Nominal Current	Transformer Ratio
Transformer Connection	DDSU666		230V	50Hz/60Hz	*/100mA	2000:1
Direct Connection	DDSU666		230V	50Hz/60Hz	5(80)A	/

## 2. Installation

Both type type can be mounted on DIN35 standard rails, below are wiring connection instruction.

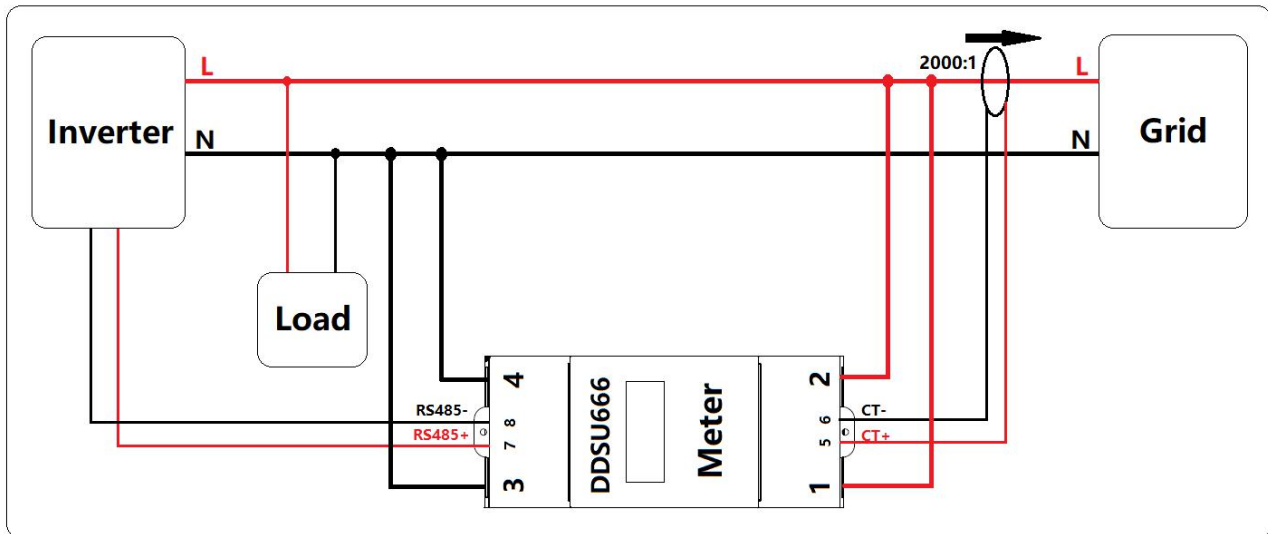
AC wire cable, OD not less than 4mm<sup>2</sup>

RS485 Communication Interface, Baud rate can set to 1200, 2400, 4800, and 9600. One communication circuit can maximum connected to 32 devices, each device must set to different communication address. Communication cable use Shielded Twisted Pair Cable, Copper OD should not less than 0.5mm<sup>2</sup>, communication cable should keep away from strong cables or other strong electric fields, maximum distance is 1200 meters. Connection instruction as below:

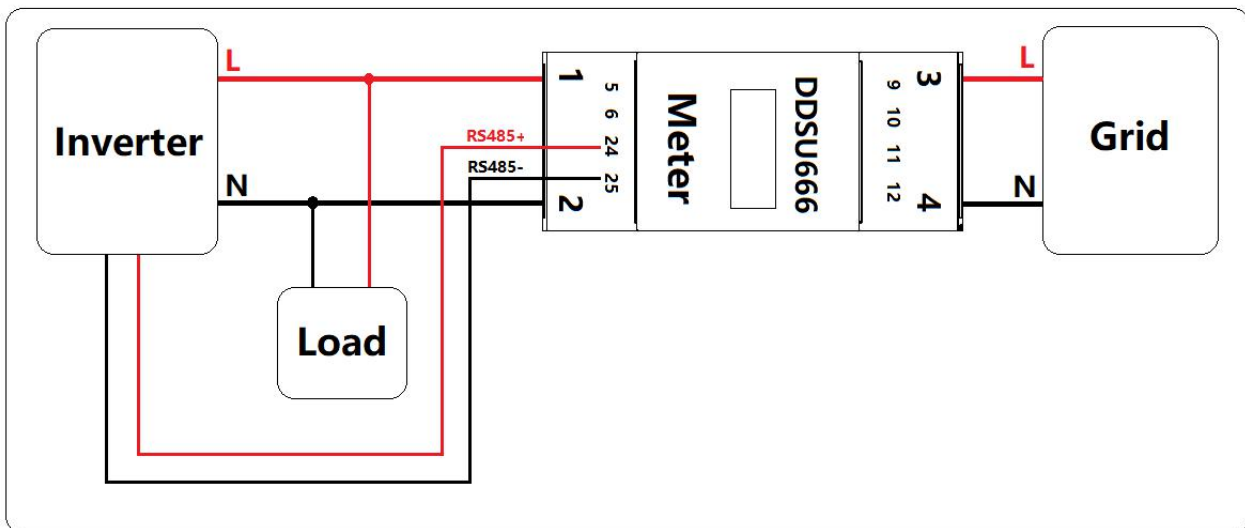
Note: Different inverter has different positive and negative RS485 port, please read the User Manuel carefully when doing the connection.

(1) Connection with Current Transformer

## Single-Phase Meter Quick Installation Guide



(2) Direct Connection



### 3. Check Installation Result

#### 1. Current Direction

For CT connection type, closed the loads, meter shows import direction power (Imp); open the loads, meter shows export direction power (Exp), then the connection direction is correct.

#### 2. RS485 Communication

When enable the meter function, inverter will report an alarm when RS485 connection is incorrect, please check the RS485 connection when meet this situation, normally can fix by using switch the positive and negative pole.







### 4. Interface

When meter is in normal working condition, indicated light is on and flashing. If indicated light is not flashing or off, please check if the meter connection is correct.



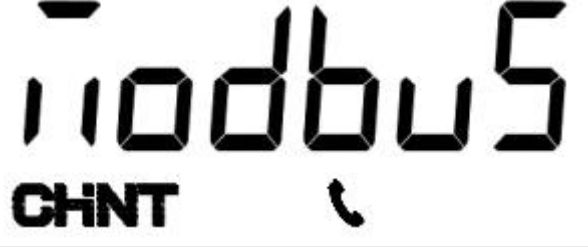



#### (1) CT connection type

## Single-Phase Meter Quick Installation Guide

Every data group indicated 5 seconds, interface as below:

Page	Content	Description
1		Voltage $U=220.0V$
2		Current $I=5.0A$
3		Active Power $P=1.1W$
4		Active Power $Q=0W$ Active Energy $E_{Imp}=0.5kWh$
5		Power Factor $F_t=1.0$
6		Frequency $F=50Hz$

## Single-Phase Meter Quick Installation Guide

7		<p>Import Active Energy EImp=1.2kWh</p>
8		<p>Export Active Energy EExp=1.0kWh</p>
9		<p>Current Communication Protocol Modbus</p>
10		<p>Current Communication Address is 11</p>
11		<p>Baud rate is 9600 1:2400 2:4800 3:9600</p>
12		<p>current communication : 8 data bits of the protocol, no valid bit and 1 stop bit</p>








### (2) Direct Connection Type

Every data group indicated 5 seconds, background light is 1 minutes, interface as below:

Button operation: Long press button, interface enter 645 protocol and Modbus protocol choose page, Short press can change the protocol, cannot switch to address page (Only ModBus protocol can switch to address page), ModBus' s address can set by using button

## Single-Phase Meter Quick Installation Guide

setting, the setting range is 1-99.

Page	Content	Description
1		Voltage $U=220.0V$
2		Current $I=5.0A$
3		Power $P=1.1kW$
4		Power Factor $Ft=1.0$
5		Frequency $F=50Hz$
6		Import Active Energy $E_{Imp}=1.2kWh$
7		Export Active Energy $E_{Exp}=1.0kWh$

## Single-Phase Meter Quick Installation Guide

8	<p>NO.</p>	<p>Current Communication Protocol Modbus</p>
9	<p>NO.</p>	<p>current communication : 8 data bits of the protocol, no valid bit and 1 stop bit</p>
10	<p>NO.</p>	<p>Current Communication Address is 11</p>
11	<p>NO.</p>	<p>Baud rate is 9600 1:2400 2:4800 3:9600</p>

### 5. Trouble Shooting

Problems	Reason	Troubleshooting
No display	<ol style="list-style-type: none"> <li>The meter wiring is incorrect;</li> <li>The voltage supplied to the meter is abnormal;</li> </ol>	<ol style="list-style-type: none"> <li>If the wiring is incorrect, please follow the correct wiring instruction (see wiring diagram);</li> <li>If the power supply voltage is abnormal, please supply power according to the voltage range specification on Manuel</li> <li>If it is not the above problem, please contact the local supplier.</li> </ol>
Current display 0	CT current sampling is abnormal.	Check whether the CT wiring is correct and stable.
RS485 Communication Abnormal	<ol style="list-style-type: none"> <li>The RS485 communication cable is open, shorted, or connected reversely;</li> <li>The address, baud rate, and data bit check digit of the instrument does not match the host;</li> <li>No matching resistor is added to the end of the RS485 communication cable (usually when the distance exceeds 100 meters);</li> <li>The communication protocol commands of the</li> </ol>	<ol style="list-style-type: none"> <li>If there is a problem with the communication cable, please replace the communication cable;</li> <li>Set the address, baud rate and data bit check digit of the meter is same as host by pressing the button, and the button setting operation will "parameter setting";</li> <li>If the communication distance is more than 100 meters, and the meter and the host have the same communication parameter settings, the communication still cannot be reached,</li> </ol>

## Single-Phase Meter Quick Installation Guide

	instrument and the host do not match;	please reduce the communication baud rate or add 120Ω resistance at the beginning and end of the communication cable (the size of resistance can adjust according to the local condition).
Parameter on display is abnormal (voltage, current, power, etc.)	Data frame parsing error;	Analyze the data frame according to the format specified in the communication protocol, pay attention to the data size end mode;