

1. Overview

DTSU666 series three phase four wire electronic energy meter(din-rail) is designed based on power monitoring and energy metering demands for electric power system, communication industry, construction industry, etc. as a new generation of intelligent instrument combining measurement and communication function, mainly applied into the measurement and display for the electric parameters in the electric circuit including three voltage, three current, active power, reactive power, frequency, positive&negative energy, four-quadrant energy, etc. Adopting the standard DIN35mm din rail mounting and modular design, it is characterized with small volume, easy installation and easy networking, Can be applied into Growatt Hybrid inverter and AC coupled inverter.

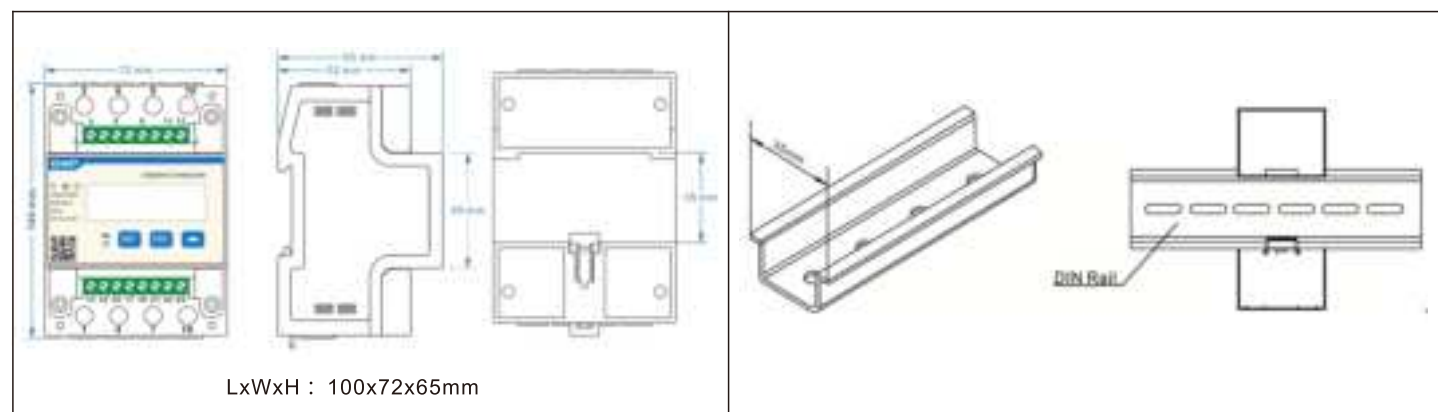
2. Technical Parameters

General Specifications		Enviroment	
Rated voltage	3×230/400Vac	Rated temperature	-10℃~+45℃
Reference frequency	50Hz/60Hz	Limit temperature	-25℃~+70℃
Specified operating voltage range	0.9Un~1.1Un	Relative humidity(average annual)	<75%
Extended operating voltage range	0.8Un~1.15Un	Atmosphere	63.0kPa~106.0kPa
Voltage line power consumption	≤1.5W/6VA	Installation category	CAT III
Input current	0.25-5(80)A	Degree of pollution	Conform to RoHS
Starting current	0.004Ib	Communication	
AC voltage withstand	2KV /5mA for 1 minute	Communication	RS485 output for Modbus RTU
Impulse voltage withstand	4KV-1.2/50uS waveform	Baud rate	9600
Max. Reading	9999999kWh	Pulse	400imp/kWh
Accuracy		Mechanics	
Active power	1% of range maximum	Din rail dimensions	100x72x65(LxWxH)
Reactive power	2% of range maximum	Mounting	DIN rail 35mm
		Sealing	IP51 (indoor)

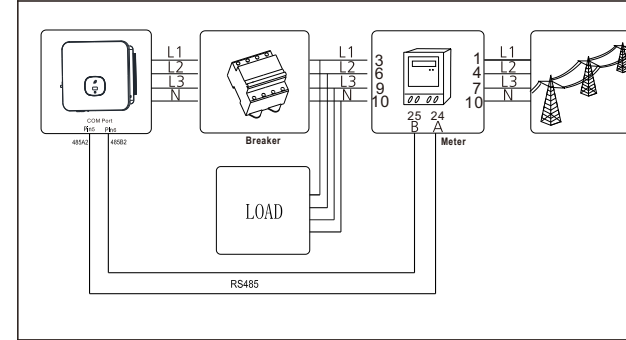
3. Unpacking

Item	Number	Description
A	1	Three phase meter(TPM-C)
B	1	User Manual
C	1	Rs485 cable (standard length 5m)

4. Dimension (Unit: mm)



5. Installation



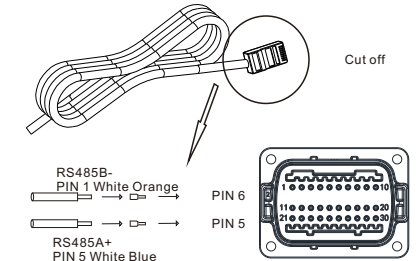
Meter Pin NO.	Description	Meter Connection
1/4/7/10	L1/L2/L3/N-in	Grid L1/L2/L3/N
3/6/9/10	L1/L2/L3/N-out	AC connector & Load L1/L2/L3/N
24	RS485A	COM Port Pin 5 RS485A3
25	RS485B	COM Port Pin 6 RS485B3

a. The network cable is described as follows:

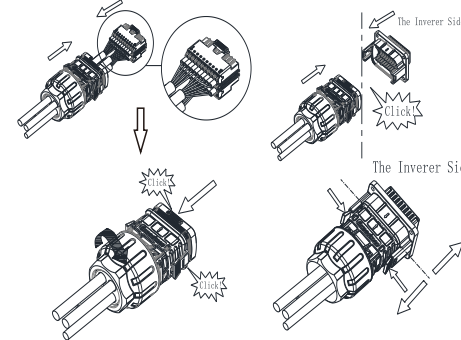
LAN line 1-8 colors as below:

PIN	1	2	3	4
Clour	White orange	Orange	White green	Blue
PIN	5	6	7	8
Clour	White blue	Green	White brown	Brown

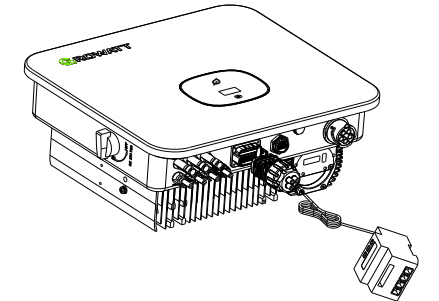
b. Cut the crystal head, find out PIN1 and PIN5, and connect the communication terminals according to the picture.



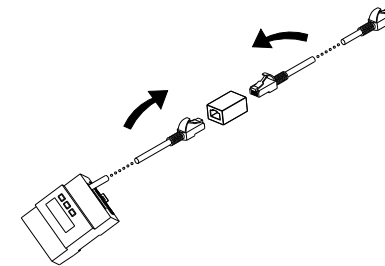
c. Connect the communication terminals as shown.



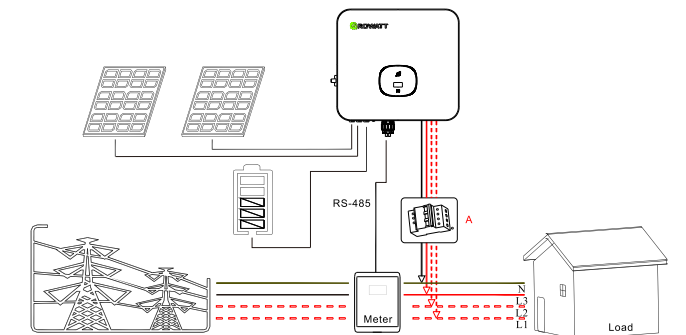
d. Connect the communication terminals to the 30-pin communication terminals of the inverter.



e. The standard RS485 cable length is 15m. If need longer RS485 cable, please use an ethernet coupler to extend and make sure RS485 cable less than 100m(the recommended length is less than 25m).



f. MOD XH system application block diagram wiring is as follows.



Note:

1. Be careful the wire of input and output of L/N and the range of input voltage or current, if the data is outrange, it may destroy the meter.
2. Be careful the input and output of meter line, if lines are wrong, system will work in a wrong way.

Note: If there is no commyucation(MOD-XH shows warning 401 or meter communication indicator is don't display), please check the communication LAN line, baud rate, and address.

6. Display

From the displayed interface, the electrical parameter and energy data are all primary side data (that is, the multiplied by current and voltage ratios). The energy measuring value will be displayed seven bits, with the displaying range from 0.00kWh to 9999999Mwh.



Diagram 1 Liquid crystal display

