

DTSU666-H Smart Power Sensor Quick Guide

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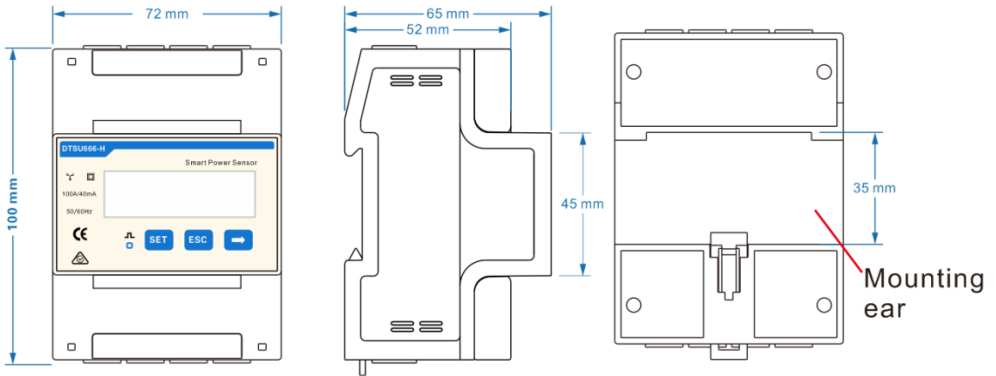


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1 Overview

Model Naming Conventions

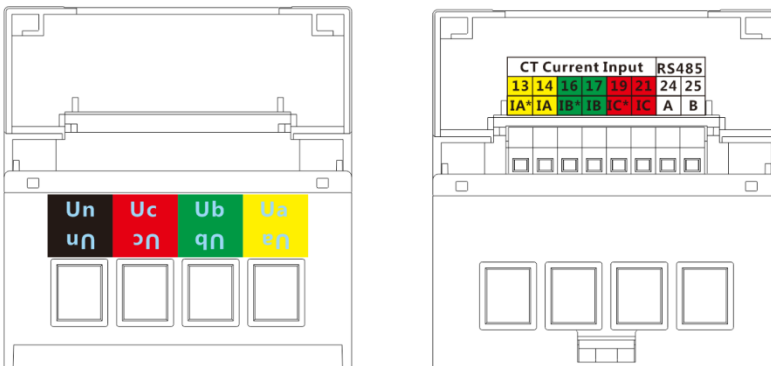
DTSU666-H



Port Definition

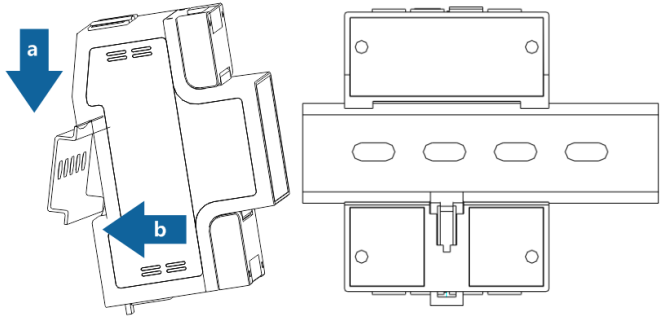
Voltage Input: $3 \times 230/400$ V; CT Current Input: 40mA

Current Transformer(CT): 100 A/40 mA



2 Installing the DTSU666-H

- 1 Install the smart power sensor on the standard din rail of DIN35mm.
- 2 Install the Smart Power Sensor to the standard din rail from the top to the bottom, and then push the instrument to the din rail from the bottom to the front part.



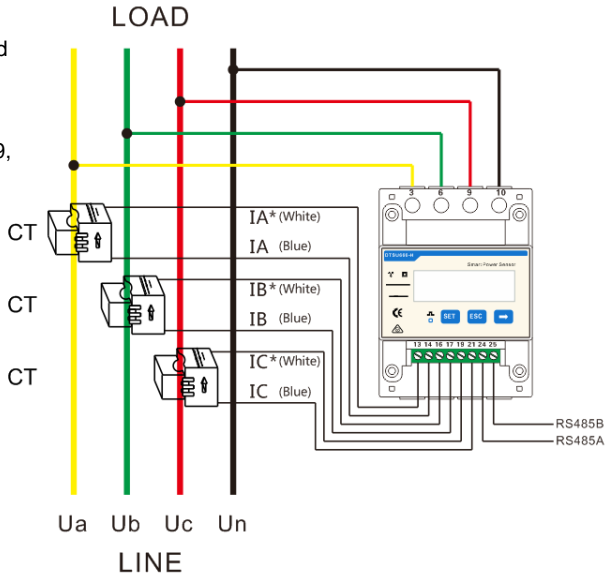
3 Installing the DTSU666-H Cable

Prepare cables

Cable	DTSU666-H	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
AC power cable	Ua-3	Four-core outdoor copper cable	4-6 mm ²	10-21 mm	Prepared by the customer
	Ub-6				
	Uc-9				
	Un-10				
CT cable	IA*-13	N/A	N/A	N/A	Manufacturer
	IA-14	N/A	N/A	N/A	
	IB*-16	N/A	N/A	N/A	
	IB-17	N/A	N/A	N/A	
	IC*-19	N/A	N/A	N/A	
	IC-21	N/A	N/A	N/A	
Comm. cable	RS485A-24	Two-core outdoor shielded twisted pair	0.25-1 mm ²	4-11 mm	Manufacturer
	RS485B-25				

Connecting Diagram

1. Connect the Ua, Ub, Uc, Un voltage lines to the 3, 6, 9 and 10 terminals of the collector.
2. Connect current transformer outlets IA*, IA, IB*, IB, IC*, IC to terminals 13, 14, 16, 17, 19, 21 of the collector.
3. Connect RS485A and RS485B to the communication host.



4 User Interface

Display (Auto loop)

Auto loop Switch time = 5s.

No.	Display interface	Description	No.	Display interface	Description
1		Imp. active energy =10000.0kWh	2		Exp. active energy =2345.67kWh
3		active power =3.291kW	4		Phase A voltage =220.0V
5		Phase B voltage =220.1V	6		Phase C voltage =220.20V
7		Phase A current =5.001A	8		Phase B current =5.001A
9		Phase C current =5.002A	10		Frequency Freq=50.00Hz

Display (Change by key “”)

No.	Display interface	Description	No.	Display interface	Description
1	Σ 7654.33 ^{kWh}	Comb. active energy =7654.33kWh	2	Imp. 10000.00 ^{kWh}	Imp. active energy =10000.0kWh
3	Exp. 234567 ^{kWh}	Exp. active energy =2345.67kWh	4	NO n 1-9600	None Parity, 1 Stop Bit, baud=9600bps
5	NO ----011	Comm.Add =011	6	UA 220.0 ^V	Phase A voltage =220.0V
7	Ub 220.1 ^V	Phase B voltage =220.1V	8	Uc 220.2 ^V	Phase C voltage =220.20V
9	IA 5.000 ^A	Phase A current =5.001A	10	Ib 5.001 ^A	Phase B current =5.001A
11	IC 5.002 ^A	Phase C current =5.002A	12	Pt 3291 ^{kW}	Phase active power=3.291k W
13	PA 1.090 ^{kW}	Phase A active power=1.090k W	14	Pb 1.101 ^{kW}	Phase B active power=1.101k W
15	PC 1.100 ^{kW}	Phase C active power =1.100kW	16	Ft 0.500	power factor PFt=0.500L
17	FA 1.000	Phase A power factor PFa=1.000L	18	Fb 0.500	Phase B power factor PFb=0.500L
19	FC -0.500	Phase C power factor PFc=0.500C	20	F 50.00	Frequency Freq=50.00Hz

Comb. active energy = Imp. active energy - Exp. active energy

5 Troubleshooting

Fault phenomenon	Factor analysis	Elimination method
No display after the instrument being powered on	<ol style="list-style-type: none">1. Incorrect wiring mode;2. Abnormal voltage supplied for the instrument;	<ol style="list-style-type: none">1. If the wiring mode is incorrect, please connect based on the correct wiring mode (see the wiring diagram).2. If the supplied voltage is abnormal, please supply the voltage on the instrument specification.
Abnormal RS485 communication	<ol style="list-style-type: none">1. The RS485 communication cable is disconnected, short circuit or reversely connected.2. The address, baud rate, data bit and parity bit of the instrument is not in accordance with the host computer.	<ol style="list-style-type: none">1. If any problems for the communication cable, please change the cable.2. Set the address, baud rate, data bit and parity bit of the instrument to be the same as the host computer through buttons and so as the "parameter setting".
Power metering inaccuracy	<ol style="list-style-type: none">1. Wrong wiring, please check whether the corresponding phase sequence of voltage and current is correct.2. Check whether the high & low end of current transformer inlet is reversely connected. Please observe the power, to be abnormal if any negative values.	For wrong wiring, please connect based on the correct wiring mode (see Connecting Diagram).

6 Verifying the Installation

1. Check that all mounting brackets are securely installed and all screws are tightened.
2. Check that all cables are reliably connected with correct polarity and no short circuit.

7 Powering On the System

For details, see the other description.

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