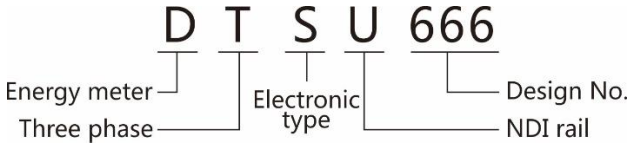
DTSU666 Three phase electronic energy meter user manual

1.Overview of products

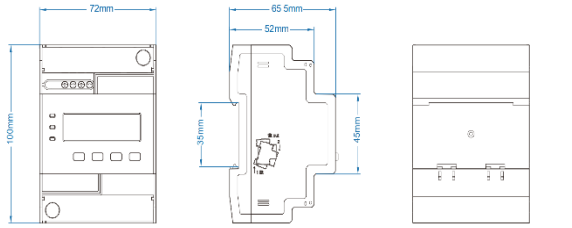
1.1 Applicable range

The DTSU666 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.

1.2 Specification for product model



1.3 Outline & Mounting Dimension



2.Datasheet

Type	DTSU666
Electrical Characteristics	
Application	Three phase
Nominal Voltage[V]	3×57.7V/100V…3×240V/415V
Voltage range	0.8Un-1.15Un
Nominal current [A]	100A/40mA, 250A/50mA, 100A/333mV, 250A/333mV (customizable)
Frequency/Range [Hz]	50/60
Accuracy class	Class 1
Power grid system	1P2W or 3P4W or 3P3W
Baud rate	1200bps/2400bps/4800bps/9600bps (default 9600bps) /19200bps/38400bps/115200bps (optional)
Physical Parameters	
Temperature	-25°C~+55°C (nominal), -40°C~+70°C (ultimate)
Installation method	DIN-Rail Mounting
Dimensions[H*W*D][mm]	100×72×65.5
Weight [g]	Approx. 236
Applicable Standard	CE, SAA, RoHS, REACH

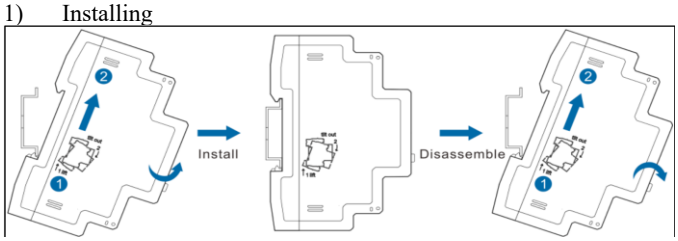
3.Instructions for installation

3.1 Check the Package

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

3.2 Installation

1) Installing



2) Prepare cables

Cable	Port	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
AC power cable	L1(Ua) L2(Ub) L3(Uc) N	Multi-core outdoor copper cable	1.5mm²~2.5 mm²	3mm~5mm	Prepared by the customer
CT cable	IA1*、IA1 IB1*、IB1 IC1*、IC1 IA2*、IA2 IB2*、IB2 IC2*、IC2	/	/	/	Manufacturer
communication cable	RS485_1 RS485_2	Two core outdoor shielded twisted pair	0.25mm²~1mm²	4mm~11mm	Prepared by the customer
	RS485_1(RJ45) RS485_2(RJ45)	Cat 6 Ethernet Cable	/	/	

4.Fault and troubleshooting

Fault phenomenon	Reason analysis	Elimination
No display after the instrument being powered on	1.Incorrect wiring mode. 2.Abnormal voltage supplied for the instrument	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.
Power metering inaccuracy	1.Wrong wiring, please check whether the corresponding phase sequence of voltage and current is correct. 2. Check whether the CT specification is correct. Note : Pa, Pb, and Pc are abnormal if the values are negative. (except for some special equipment)	1.For wrong wiring, please connect based on the correct wiring mode (see the wiring diagram). 2.If a negative value is displayed, change the cable connection mode of the current transformer to ensure that the high and low ends are connected properly.
Abnormal RS485 communication	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 inverter. 3.The RS485 communication cable is not equipped with a matching resistor at the end (usually when the distance exceeds 150 meters); 4. Check whether external devices are reliably grounded; Note: The communication protocol command between the instrument and the host does not match.	If wrongly connected, please connect the voltage of phase A, B and C to the wiring terminal of the instrument