DDSU666-G Smart Meter
Quick Operation Guide

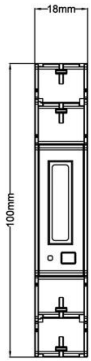
Issue: 001-01
Date: 2024-06

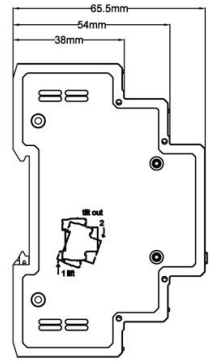
ZTW0. 464. 0242

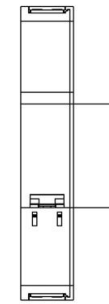
1 Product Description

1.1 Outline and mounting dimensions

Model	Wiring Method	modulus	Dimensions (L*W*H) mm	Suttle(kg)	Rail dimension
DDSU666-G Series	direct access	1	100×18×65.5	About 0.089	DIN35







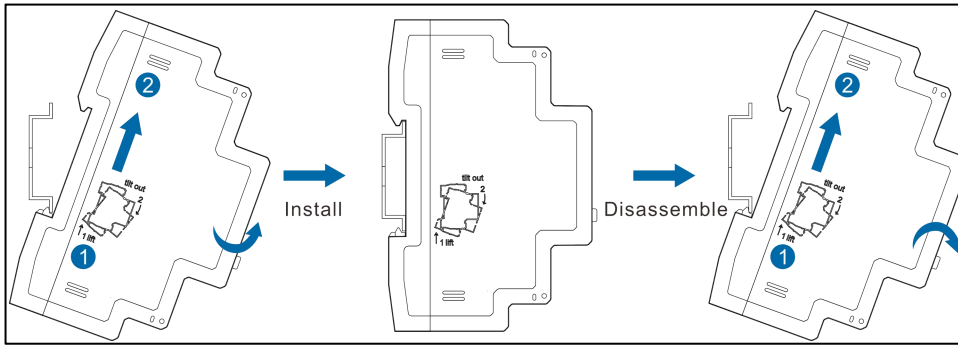
NOTE

The unnoted tolerance is ±0.5mm.

1.2 Product performance specifications

Model	DDSU666-G
Current specification	0.25-5(80)A
Access method	Direct access
Nominal voltage	220V…240V
Frequency	50/60Hz
Current measuring range	0~80A
Voltage measuring range	176V…253V
Accuracy class	Class B(Class 1)
Power grid system	single phase
Baud rate	1200bps/2400bps/4800bps/9600bps(default 9600bps)
Temperature	-25℃~+55℃(nominal),-40℃~+70℃(ultimate)
Way to install	DN35 Rail mounting

2 Install

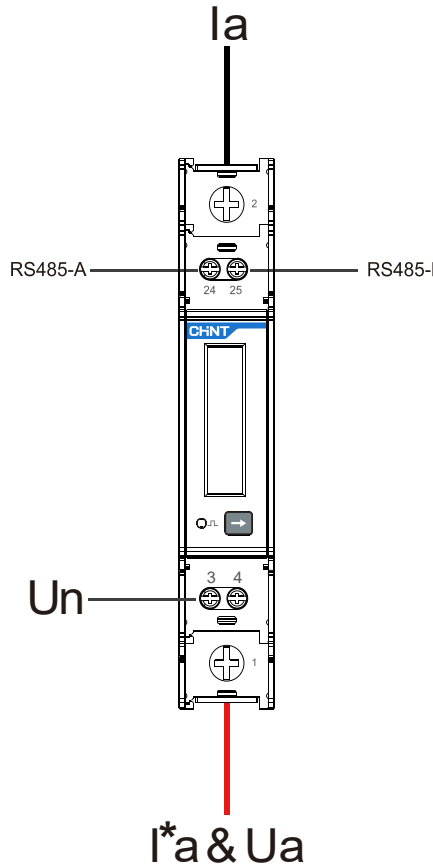


3 Installing cables

3.1 Prepare Cables

Cable	Port	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Voltage cable	U-1 or 2	Single core outdoor copper cable	25mm²	10mm	Prepared by the customer
	U-3				
Current cable	U-1	Single core outdoor copper cable	4mm² -25mm²	10mm	Prepared by the customer
	U-2				
communication cable	RS485-24	Two core outdoor shielded twisted pair	0.25mm²~1.5mm²	4mm~11mm	Prepared by the customer
	RS485-25				

3.2 Wiring diagram



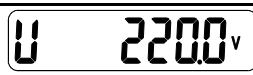
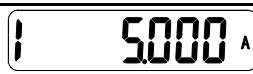
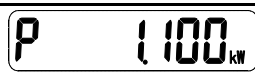
⚠ CAUTION

Before connecting cables, ensure that the Smart Meter is not damaged in any way; Please ensure that the grounding wire is securely installed; Before powering on, please ensure that the wiring is correct, otherwise electric shock, damage to the smart meter, or fire may occur.

4 Displays project and parameter Settings

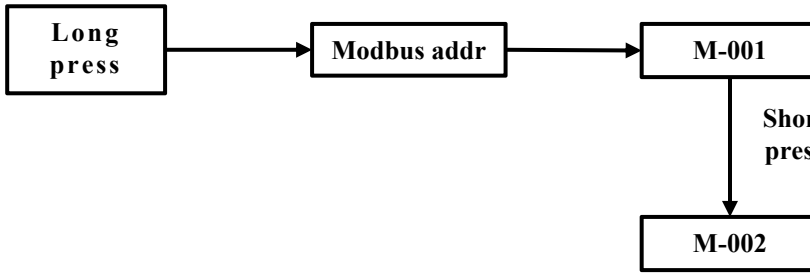
4.1 Display

The data wheel display time is 5s. Press the key to switch the display interface.

No.	Display interface	Description
1		import active energy = 2.2kWh
2		export active energy = 2.3kWh
3		voltage = 220.0V
4		current= 5.000 A
5		active power = 1.100 kW
6		Power factor(PF) =1.000
7		Frequency of the first loop =50.000Hz
8		The current communication protocol is Modbus
9		RS485 use 8 data bits, no check bit, and 1 stop bit
10		RS485 is Modbus, and the communication address is 1
11		RS485 baud rate is 9600bps
12		The current communication protocol is 645
13		Communication address of 645 is 000000000001
14		

4.3 Parameter setting operation example

Button description: ： Hold down the button and lift it to enter the screen of setting Modbus address. Press again to add 1 to the address. 5s No operation timeout switch back wheel display.



5 Diagnosis, analysis and troubleshooting of common faults

Fault phenomenon	Reason analysis	Elimination
No display after the instrument being powered on	Incorrect wiring mode; 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. If this is not the problem above, contact your local supplier.

6 Warranty and Service

The manufacturer implements three guarantees for product quality. Within 18 months from the date of delivery, if the user fully complies with the provisions of this manual and the factory seal is still intact, the instrument is found damaged during use, and the company is responsible for free repair or replacement.

7 Environmental protection

Dear customer：

Please help us do one thing, when this product at the end of its life, in order to protect our environment, please do a good job of recycling the product or its parts and materials. Please also dispose of materials that cannot be recycled. Thank you very much for your cooperation and support.

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9 Manufacturer Information

Manufacturer	Zhejiang Chint IoT Technology Co.,Ltd.
Address	Wenzhou Daqiao Industrial Park, Beibaixiang Town, Yueqing City, Wenzhou City, Zhejiang Province, China
Tel.	+86-577-62877777
Service Hotline	+86-400-8177777
Anti counterfeiting complaints	+86-577-62789987
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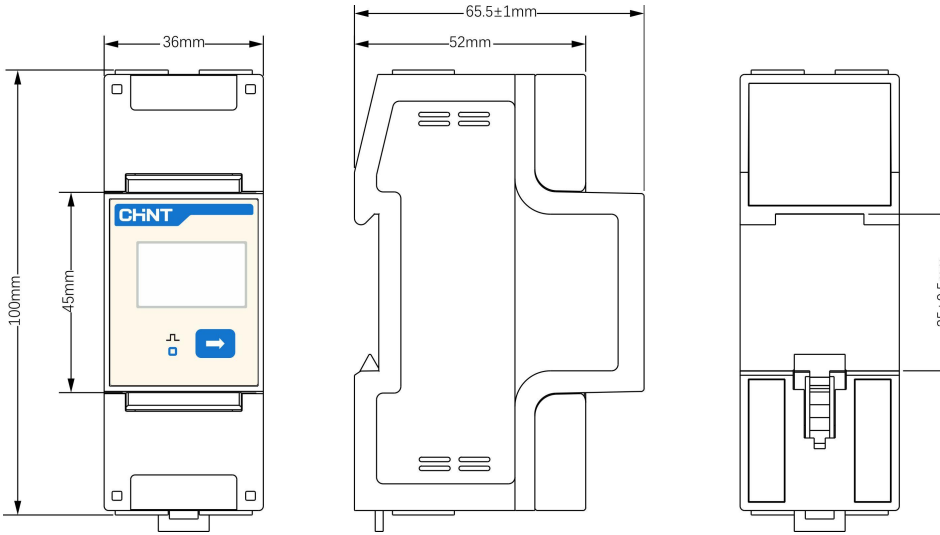
1 Product Description

1.1 Outline and mounting dimensions

Model	Wiring Method	modulus	Dimensions (L*W*H) mm	Suttle(kg)	Rail dimension
DDSU666-G Series	direct access	2	100×36×65.5	About 0.18	DIN35



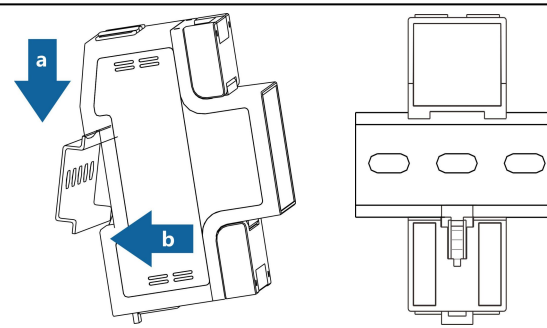
NOTE
The unnoted tolerance is ±1mm;
The appearance, size and information are subject to actual objects.

1.2 Product performance specifications

Model	DDSU666-G
Current specification	0.25-5(80)A
Access method	Direct access
Nominal voltage	220V…240V
Frequency	50/60Hz
Current measuring range	0~80A
Voltage measuring range	100V…276V
Accuracy class	Class B(Class 1)
Power grid system	single phase
Baud rate	1200bps/2400bps/4800bps/9600bps(default 9600bps)/ 19200bps/115200bps
Temperature	-25℃~+55℃(nominal),-40℃~+70℃(ultimate)
Way to install	DN35 Rail mounting
Authentication	CE,RCM,SAA,RoHS

2 Install

Mount the Smart Meter to the 35mm DIN rail. Hook it to the top edge of the rail and press down until it snaps into place.



3 Installing cables

3.1 Prepare Cables

- **0.25-5(80)A wiring - Direct Access**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Voltage,Current Cable(down-entering and over-out)	L or UL,I*	1	Multi-core Outdoor Copper Cable	4mm^2~25mm^2	5mm~10mm	Prepared by the customer
	I	3				
	N or UN	2				

- **Communications cable**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Communications cable (advise)	RS485_A	24	Two core outdoor twisted-pair shielded wire	0.25mm^2~1.5mm^2	4mm~11mm	Prepared by the customer
	RS485_B	25				

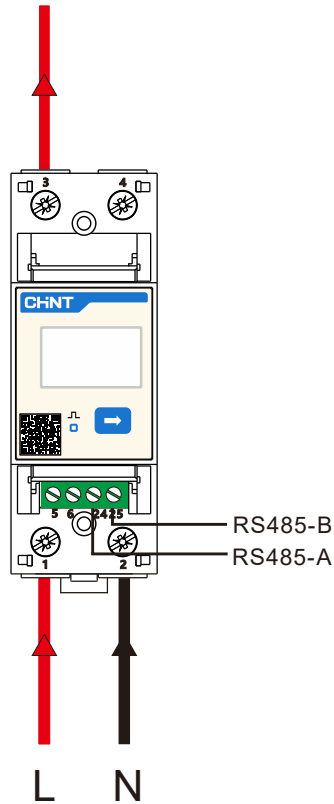
*The wiring method shall be based on the actual object.

NOTE

The maximum torque for terminal screws 1、2 and 3 is 1.7 N·m, and the recommended torque is 0.9 N·m to 1.1 N·m. The maximum torque for terminal screws 5, 6, 24 and 25 is 0.4 N·m, and the recommended torque is 0.15 N·m to 0.25 N·m. The wiring method shall be based on the actual object.

3. 2 Wiring Diagram

- **0.25-5(80)A wiring - Direct Access**



⚠ CAUTION

The following conditions may result in electric shock or fire.

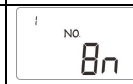
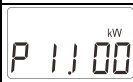
1. Before connecting cables, ensure that the Smart Meter is not damaged in any way.
2. Please ensure that the grounding wire is securely installed.
3. Before powering on, please ensure that the wiring is correct.

4 Displays project and parameter Settings

4.1 Display

The key "→" is used to switch the display interface and set the parameter disp to enable the rotating display function.

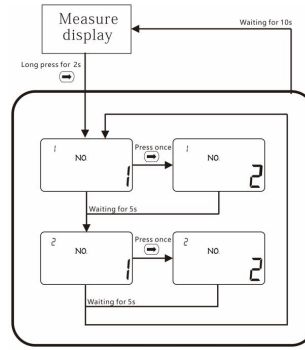
When RS485 communicating, the 'T' sign will flashes.

No.	Display interface	Instruction	No.	Display interface	Instruction
1		Total positive active energy = 1.20kWh	11		The communications are simultaneously set to the 645 protocol with address high 00000001
2		Reverse total active energy = 1.00kWh	12		The communication serial port is Modbus and the communication address is 1
3		Voltage U= 220.0V	13		Baud rate of 9600bps for the communication serial port
4		First circuit current I = 5.000 A	14		The communication serial port has 8 data bits, no parity, and 1 stop bit.
5		Active power P = 1.100kW	15		
6		Power factor Ft = 1.000	16		
7		Frequency = 50.000 Hz	17		
8		The communications are simultaneously set to the 645 protocol with address high 00000000	18		

4.2 Parameter setting operation example

Description of pressing key: "→" means "add". Long press the key for 2s, the display interface enters the first Modbus address setting interface, short press to set the address size, stop operation and wait for 5s to automatically switch to the next setting. If it has not been operated, exit the key setting after 10s and return to the normal measurement display interface.

Description of pressing key



NOTE

1,If the communication is abnormal, check and set the parameters.
2,If the communication is single-channel, the time of key setting exit is 5s.
3,The range of communication address can be customized according to customer requirements, the default communication address ranges from 1 to 247.

5 Diagnosis, analysis and troubleshooting of common faults

Fault phenomenon	Reason analysis	Elimination
No display after the instrument being powered on	Incorrect wiring mode; 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. If this is not the problem above, contact your local supplier.

6 Warranty and Service

The manufacturer implements three guarantees for product quality. Within 18 months from the date of delivery, if the user fully complies with the provisions of this manual and the factory seal is still intact, the instrument is found damaged during use, and the company is responsible for free repair or replacement.

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DDSU666-G Smart Meter
Quick Operation Guide

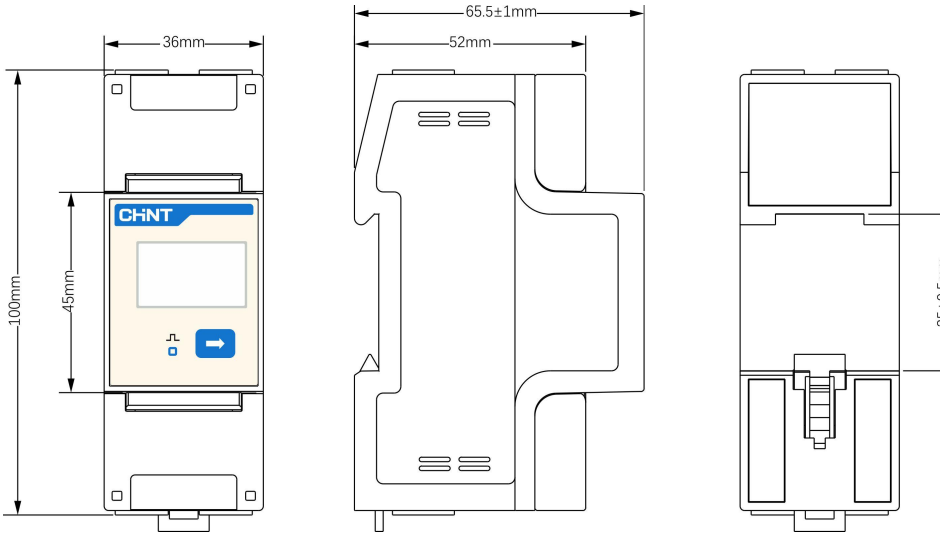
Issue: 001-01
Date: 2024-06

ZTW0. 464. 0239

1 Product Description

1.1 Outline and mounting dimensions

Model	Wiring Method	modulus	Dimensions (L*W*H) mm	Suttle(kg)	Rail dimension
DDSU666-G Series	via current transformer access	2	100×36×65.5	About 0.15	DIN35 standard guide rails



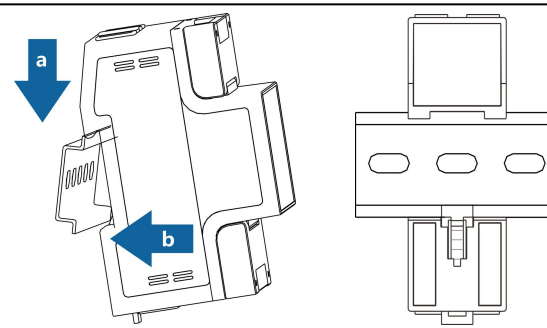
NOTE
The unnoted tolerance is ±1mm;
The appearance, size and information are subject to actual objects.

1.2 Product performance specifications

Model	DDSU666-G
Current specification	0.015-1.5(6)A
Access method	Via current transformer access
Nominal voltage	220V…240V
Frequency	50/60Hz
Current measuring range	0~6A
Voltage measuring range	100V…276V
Accuracy class	Class C (0.5S)
Power grid system	single phase
Baud rate	1200bps/2400bps/4800bps/9600bps(default 9600bps)/ 19200bps/115200bps
Temperature	-25℃~+55℃(nominal),-40℃~+70℃(ultimate)
Way to install	Rail mounting
Authentication	CE,RCM,SAA,RoHS

2 Install

Mount the Smart Meter to the 35mm DIN rail. Hook it to the top edge of the rail and press down until it snaps into place.



3 Installing cables

3.1 Prepare Cables

- **0.015-1.5 (6)Awiring - Via current transformer access**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Voltage Cable	L or UL	3	Multi-core Outdoor Copper Cable	4mm^2~25mm^2	5mm~10mm	Prepared by the customer
	N or UN	4				
Current transformer cable	I*	9	Multi-core Outdoor Copper Cable	1.5mm^2~2.5mm^2	3mm~5mm	Prepared by the customer or supplied with current transformers
	I	10				

- **Communications cable**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Communications cable (advise)	RS485_1 A	24	Two core outdoor twisted-pair shielded wire	0.25mm^2~1.5mm^2	4mm~11mm	Prepared by the customer
	RS485_1 B	25				

*The wiring method shall be based on the actual object.

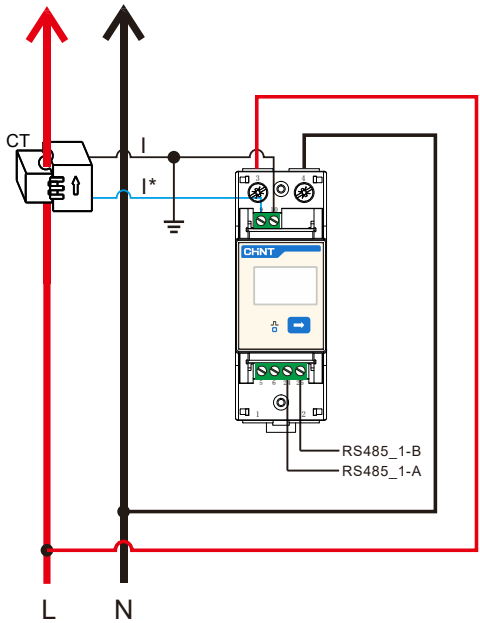
NOTE

The maximum torque for terminal screws 3 and 4 is 1.7 N·m, and the recommended torque is 0.9 N·m to 1.1 N·m. The maximum torque for terminal screws 5, 6, 9, 10, 24 and 25 is 0.4 N·m, and the recommended torque is 0.15 N·m to 0.25 N·m.

3. 2 Wiring Diagram

CT specification requirements: accuracy class 0.5 or 0.5s class, secondary side current 1A or 5A.

- **0.015-1.5 (6)Awiring - via current transformer access**



⚠ CAUTION

The following conditions may result in electric shock or fire.

1. Before connecting cables, ensure that the Smart Meter is not damaged in any way.
2. Please ensure that the grounding wire is securely installed.
3. Before powering on, please ensure that the wiring is correct.

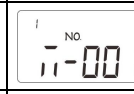
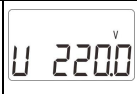
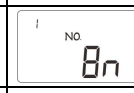
NOTE

If there is only one 485 port, there is no 5 or 6 terminal.

4 Displays project and parameter Settings

4.1 Display

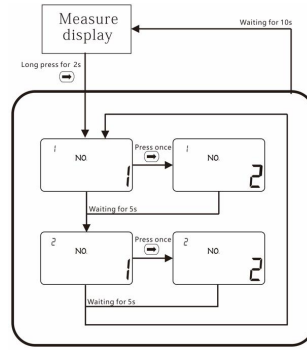
The key "→" is used to switch the display interface and set the parameter to enable the rotating display function.

No.	Display interface	Instruction	No.	Display interface	Instruction
1		Total positive active energy = 1.20kWh	11		The communications are simultaneously set to the 645 protocol with address high 00000001
2		Reverse total active energy = 1.00kWh	12		The communication serial port is Modbus and the communication address is 1
3		Voltage U= 220.0V	13		Baud rate of 9600bps for the communication serial port
4		First circuit current I = 5.000 A	14		The communication serial port has 8 data bits, no parity, and 1 stop bit.
5		Active power P = 1.100kW	15		
6		Power factor Ft = 1.000	16		
7		Frequency = 50.000 Hz	17		
8		The communications are simultaneously set to the 645 protocol with address high 00000000	18		

4.2 Parameter setting operation example

Description of pressing key: "→" means "add". Long press the key for 2s, the display interface enters the first Modbus address setting interface, short press to set the address size, stop operation and wait for 5s to automatically switch to the next setting. If it has not been operated, exit the key setting after 10s and return to the normal measurement display interface.

Description of pressing key



NOTE

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5 Diagnosis, analysis and troubleshooting of common faults

Fault phenomenon	Reason analysis	Elimination
No display after the instrument being powered on	Incorrect wiring mode; 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. If this is not the problem above, contact your local supplier.

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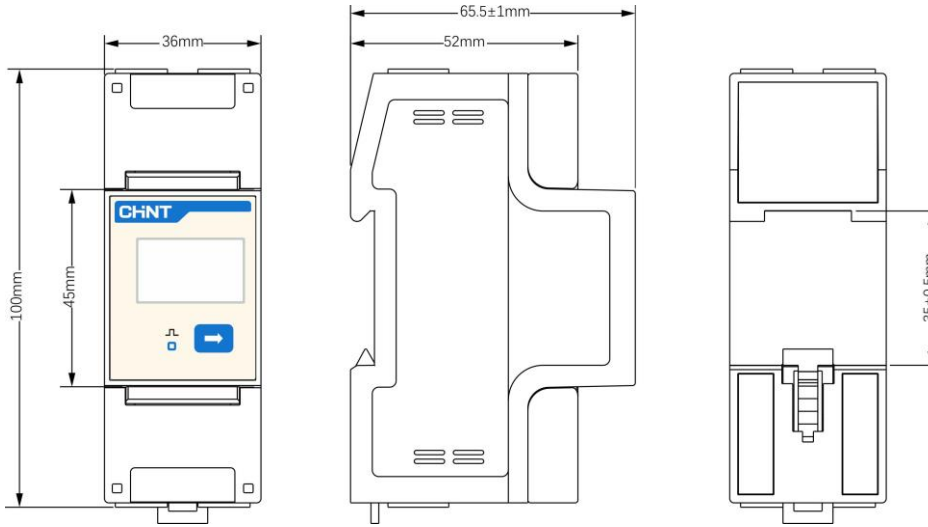
1 Product Description

1.1 Outline and mounting dimensions

Model	Wiring Method	modulus	Dimensions (L*W*H) mm	Suttle(kg)	Rail dimension
DDSU666-G Series	External CT access	2	100×36×65.5	About 0.15	DIN35 standard guide rails



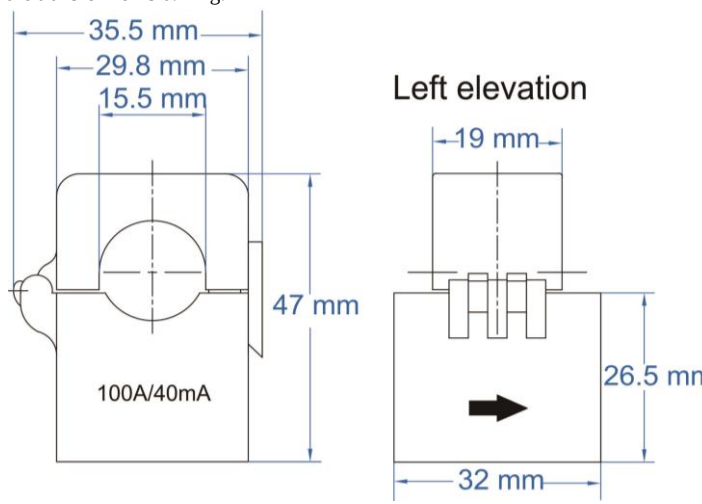
NOTE
The unnoted tolerance is ±1mm;
The appearance, size and information are subject to actual objects.

1.2 Product performance specifications

Model	DDSU666-G
Current specification	100A/40mA
Access method	External CT access
Nominal voltage	220V…240V
Frequency	50/60Hz
Current measuring range	0~100A
Voltage measuring range	100V…276V
Accuracy class	Class B(Class 1)
Power grid system	single phase
Baud rate	1200bps/2400bps/4800bps/9600bps(default 9600bps)/ 19200bps/115200bps(customizable)
Temperature	-25℃~+55℃(nominal),-40℃~+70℃(ultimate)
Way to install	Rail mounting
Authentication	CE,RCM,SAA,RoHS

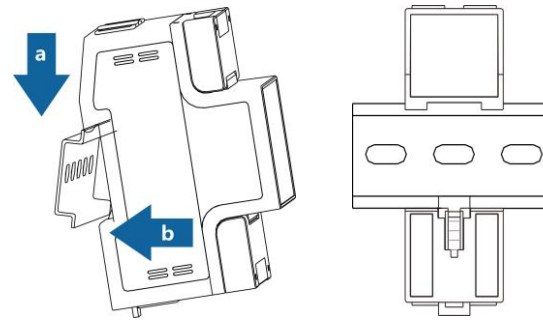
1.3 Recommended current transformers

Current transformer cable length of 6000 ± 20mm, if the cable is too long can be cut short, if the cable is too short can be extended cable (up to 15000mm).
The net weight of the transformer is 0.12kg.



2 Install

Mount the Smart Meter to the 35mm DIN rail. Hook it to the top edge of the rail and press down until it snaps into place.



3 Installing cables

3.1 Prepare Cables

- **100A/40mA wiring - External CT Access**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Voltage Cable	L or UL	3	Multi-core Outdoor Copper Cable	4mm^2~25mm^2	5mm~10mm	Prepared by the customer
	N or UN	4				
Current transformer cable(single circuit)	I1*	9	/	/	/	Prepared by the customer or supplied with current transformers
	I1	10				
Current transformer cable(double circuit)	I2*	11(selectable)				
	I2	12(selectable)				

- **Communications cable**

Cables	Port	Port number	Type	Conductor Cross-sectional Area Range	Outer Diameter	Source
Communications cable (advise)	RS485_1 A	24	Two core outdoor twisted-pair shielded wire	0.25mm^2~1.5mm^2	4mm~11mm	Prepared by the customer
	RS485_1 B	25				
	RS485_2 A	5(selectable)				
	RS485_2 B	6(selectable)				

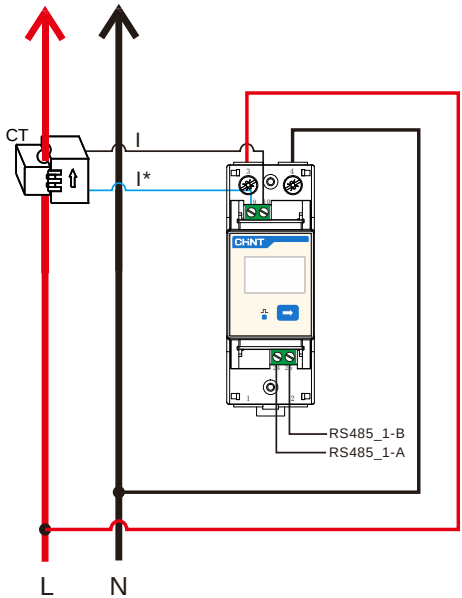
*The wiring method shall be based on the actual object.

NOTE

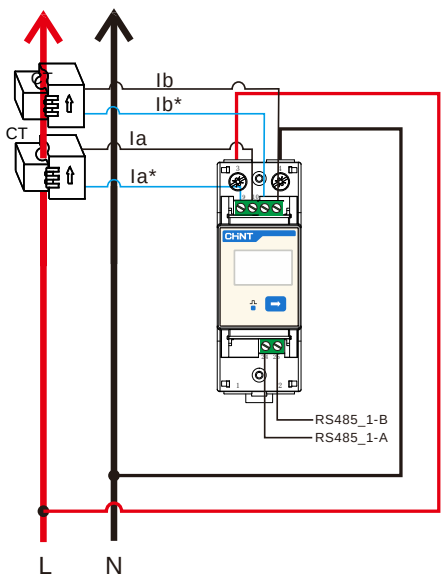
The maximum torque for terminal screws 3 and 4 is 1.7 N ⋅m, and the recommended torque is 0.9 N ⋅m to 1.1 N ⋅m. The maximum torque for terminal screws 5, 6, 9, 10, 11, 12, 24 and 25 is 0.4 N ⋅m, and the recommended torque is 0.15 N ⋅m to 0.25 N ⋅m.

3. 2 Wiring Diagram

- **100A/40mA single circuit wiring - External CT Access**



- **100A/40mA double circuit wiring - External CT Access**



⚠ CAUTION

The following conditions may result in electric shock or fire.

1. Before connecting cables, ensure that the Smart Meter is not damaged in any way.
2. Please ensure that the grounding wire is securely installed.
3. Before powering on, please ensure that the wiring is correct.

NOTE

If there is only one 485 port, there is no 5 or 6 terminal.

4 Displays project and parameter Settings

4.1 Display

The key "→" is used to switch the display interface and set the parameter disp to enable the rotating display function.

No.	Display interface	Instruction	No.	Display interface	Instruction
1		Total positive active energy = 1.20kWh, a superscript of 1 would indicate a first current loop	11		Secondcircuit power factor Ft = 1.000
2		Reverse total active energy = 1.00kWh, a superscript of 1 would indicate a first current loop	12		Frequency = 50.000 Hz
3		Total positive active energy = 1.20kWh, superscript bit 2 would indicate a second current loop	13		The communications are simultaneously set to the 645 protocol with address high 00000000
4		Reverse total active energy = 1.00kWh, superscript bit 2 would indicate a second current loop	14		The communications are simultaneously set to the 645 protocol with address high 00000001
5		Voltage U= 220.0V	15		The communication serial port is Modbus and the communication address is 1
6		First circuit current I = 5.000 A	16		Baud rate of 9600bps for the communication serial port
7		Second circuit current I = 5.000 A	17		The communication serial port has 8 data bits, no parity, and 1 stop bit.
8		First circuit active power P = 1.100kW	18		
9		Second circuit active power P = 1.100kW	19		
10		First circuit power factor Ft = 1.000	20		

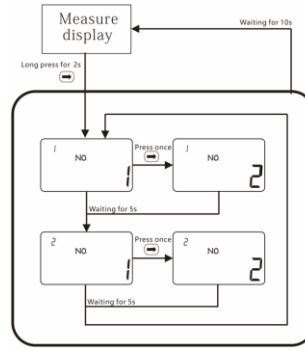
NOTE

1 the meter is a single-loop metering meter, there is no second display interface and no loop number display on the electric parameter and power display page.

4.2 Parameter setting operation example

Description of pressing key: "→" means "add". Long press the key for 2s, the display interface enters the first Modbus address setting interface, short press to set the address size, stop operation and wait for 5s to automatically switch to the next setting. If it has not been operated, exit the key setting after 10s and return to the normal measurement display interface.

Description of pressing key



NOTE

1,If the communication is abnormal, check and set the parameters.
2,If the communication is single-channel, the time of key setting exit is 5s.
3,The range of communication address can be customized according to customer requirements, the default communication address ranges from 1 to 247.

5 Diagnosis, analysis and troubleshooting of common faults

Fault phenomenon	Reason analysis	Elimination
No display after the instrument being powered on	Incorrect wiring mode; 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. If this is not the problem above, contact your local supplier.

6 Warranty and Service

The manufacturer implements three guarantees for product quality. Within 18 months from the date of delivery, if the user fully complies with the provisions of this manual and the factory seal is still intact, the instrument is found damaged during use, and the company is responsible for free repair or replacement.

7 Environmental protection

Dear customer:

Please help us do one thing, when this product at the end of its life, in order to protect our environment, please do a good job of recycling the product or its parts and materials. Please also dispose of materials that cannot be recycled. Thank you very much for your cooperation and support.

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3. The information in this brochure is subject to change without prior notice.
4. The Company shall not be liable for indirect losses arising from the provision, display or use of this material.

9 Manufacturer Information

Manufacturer	Zhejiang Chint IoT Technology Co.,Ltd.
Address	Wenzhou Daqiao Industrial Park, Beibaixiang Town, Yueqing City, Wenzhou City, Zhejiang Province, China
Tel.	+86-577-62877777
Service Hotline	+86-400-8177777
Anti counterfeiting complaints	+86-577-62789987
Website	http://aiot.chint.com
E-mail	ztwl@chint.com

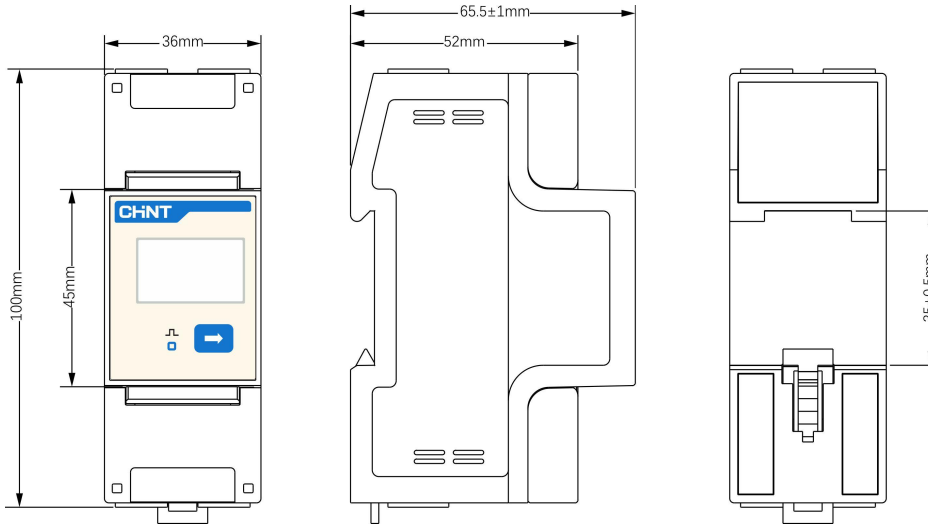
DDSU666-G Smart Meter
Quick Operation Guide

Issue: 001-01
Date: 2024-06

1 Product Description

1.1 Outline and mounting dimensions

Model	Wiring Method	modulus	Dimensions (L*W*H) mm	Suttle(kg)	Rail dimension
DDSU666-G Series	External CT access	2	100×36×65.5	About 0.15	DIN35 standard guide rails



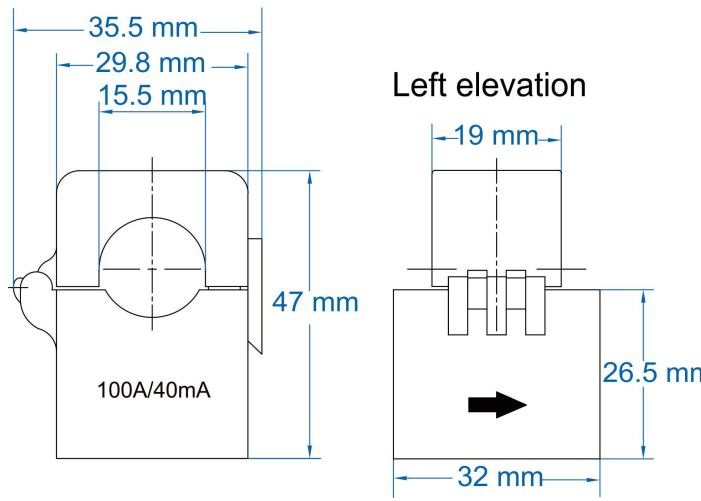
NOTE
The unnoted tolerance is ±1mm;
The appearance, size and information are subject to actual objects.

1.2 Product performance specifications

Model	DDSU666-G
Current specification	100A/40mA
Access method	External CT access
Nominal voltage	220V…240V
Frequency	50/60Hz
Current measuring range	0~100A
Voltage measuring range	100V…276V
Accuracy class	Class B(Class 1)
Power grid system	single phase
Baud rate	1200bps/2400bps/4800bps/9600bps(default 9600bps)/ 19200bps/115200bps(customizable)
Temperature	-25℃~+55℃(nominal),-40℃~+70℃(ultimate)
Way to install	Rail mounting
Authentication	CE,RCM,SAA,RoHS

1.3 Recommended current transformers

Current transformer cable length of 6000 ± 20mm, if the cable is too long can be cut short, if the cable is too short can be extended cable (up to 15000mm).
The net weight of the transformer is 0.12kg.



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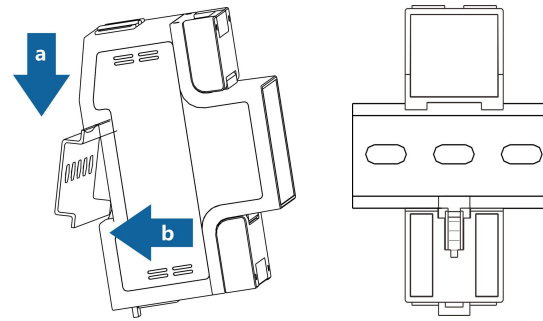

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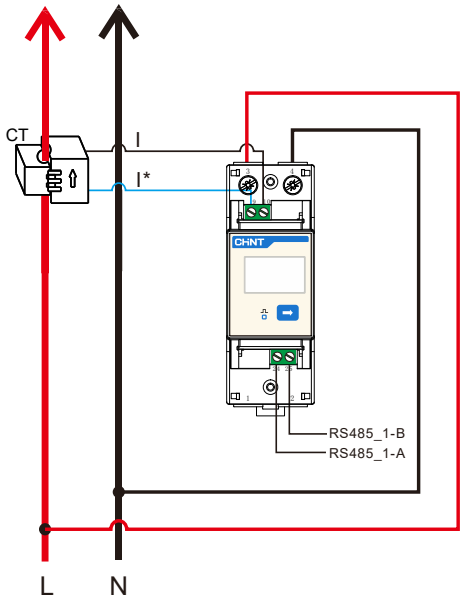

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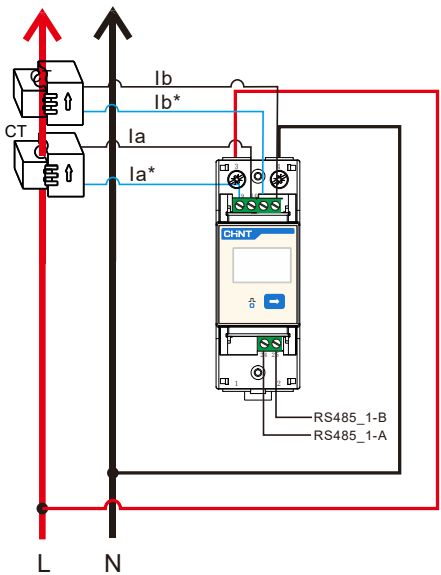

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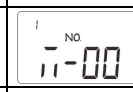
5		Voltage U= 220.0V	15		The communication serial port is Modbus and the communication address is 1
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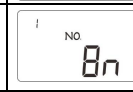
7		Second circuit current I = 5.000 A	17		The communication serial port has 8 data bits, no parity, and 1 stop bit.
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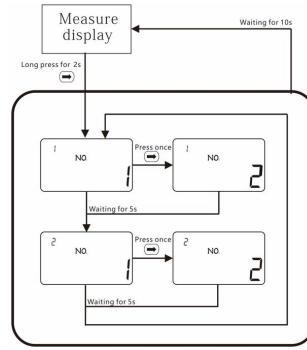

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