

CD560

DC Energy Meter



HIGH ACCURACY MEASUREMENT

- EN 50470: Cl.C (0.5); IEC 62053-41: 0.5 and ANSI C12.32: Cl.C (0.5)
- 0.2% Accuracy on Voltage and Current

ENERGY

- Bi-Directional Energy
- Dual Circuits Energy Monitor
- TOU, Four Tariffs, 12 Seasons, 14 Schedules
- Energy Record

HIGH PERFORMANCE

- Cost-Effective
- Directly Connected to 1500 V DC
- Wide Operating Temperature Range: -40 °C ~ 70 °C

CERTIFICATION

- CE

APPLICATIONS

- Electric Vehicle Charging



- Energy Storage



- Solar PV



FEATURES

Metering

- Voltage
- Current
- Power
- Ampere-Hour

Energy and Energy Record

- Bi-Directional Energy
- 12 Monthly Energy Record

Time of Use (TOU)

- Four Tariffs, 12 Seasons, 14 Schedules
- Two TOU Settings can Automatically Switch at the Setting Time
- 12 Monthly TOU Energy Record

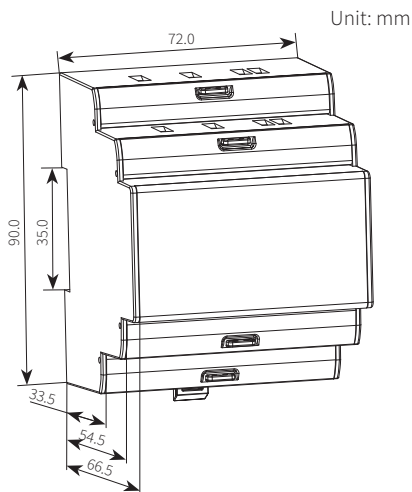
Reduce Electricity Theft Design

- Terminal Cover Sealing
- Metrology Seal

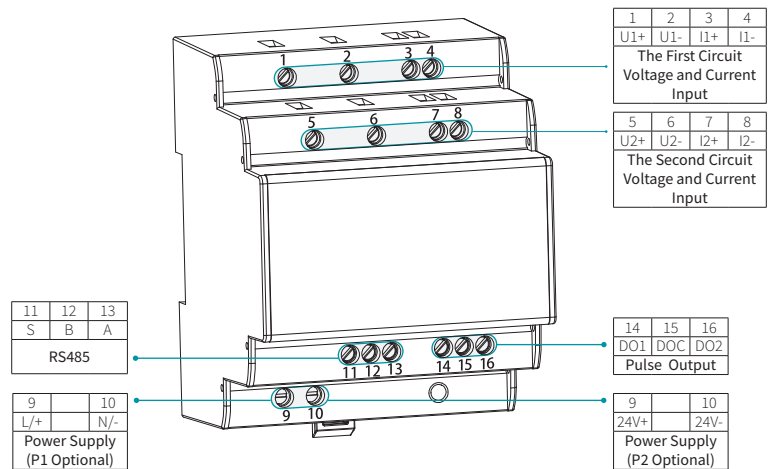
Demand

- Power and Current Demand
- Peak Demand Record

DIMENSIONS



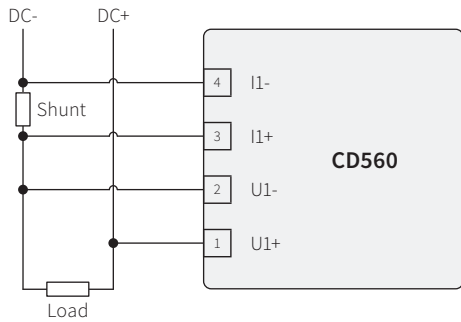
TERMINAL DIAGRAM



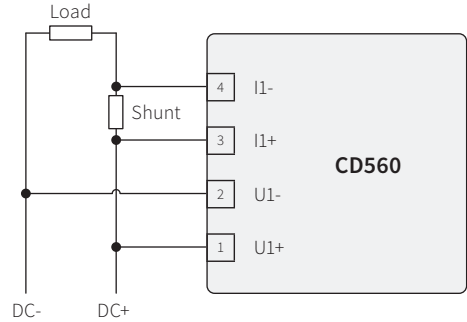
TYPICAL WIRING

The First Circuit Current Wiring Using Shunt

Shunt Connected to DC-

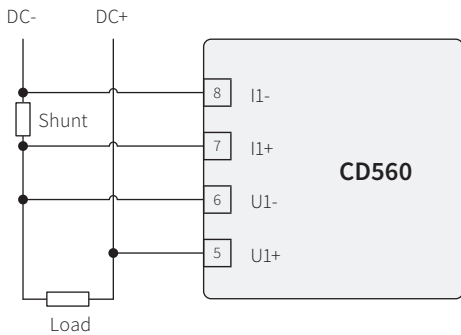


Shunt Connected to DC+ (Special specifications)

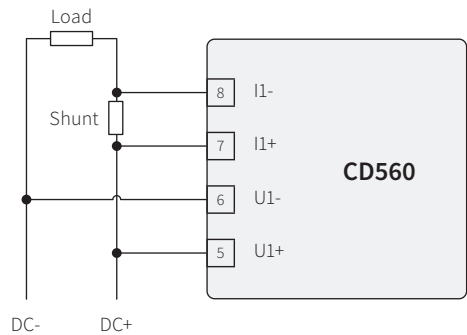


The Second Circuit Current Wiring Using Shunt

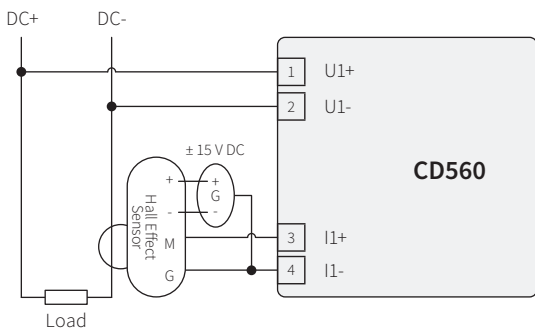
Shunt Connected to DC-



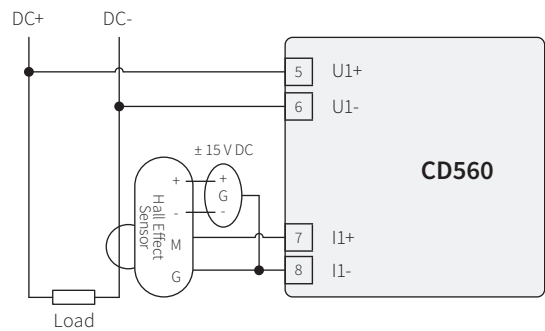
Shunt Connected to DC+ (Special specifications)



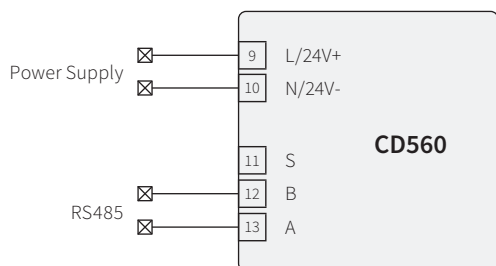
The First Circuit Current Wiring Using Hall Effect Sensor



The Second Circuit Current Wiring Using Hall Effect Sensor



Power Supply and Communication



SPECIFICATION

Measurement Accuracy

METERING			
Parameter	Accuracy	Resolution	Range
Voltage	0.2%	0.1 V	Nominal Voltage: 1000 V/1500 V DC Measurement Range: 0.1 Un ~ 1.15 Un
Current	0.2%	0.01 A	Shunt or Hall Effect Sensor Indirect Connection
Power	0.5%	0.1 kW	0 ~ 50000 A
Energy	IEC 62053-41: 0.5 EN 50470: Cl. C (0.5) ANSI C12.32: Cl. C (0.5)	0.0001 kWh (Max)	0 ~ 420000000.0 kWh
Ampere-Hour	0.5%	0.1 Ah	0 ~ 420000000.0 Ah
Stability	0.5 s/d	-	-

Operating Conditions

Voltage	
Nominal Voltage	1000 V DC/1500 V DC
Range	0.1 Un ~ 1.15 Un
Starting Voltage	0.05 Un
Accuracy	0.2%
Resolution	0.1 V

Current	
Nominal Current	Shunt : ± 50 mV/ ± 75 mV Hall Effect Sensor : 0 ~ ± 5 V/0 ~ ± 4 V
Range	0 ~ 1.2 Ib
Starting Current	0.001 Ib
Accuracy	0.2%
Resolution	0.001 A

Operating Environment	
Operating Temperature	-40 ~ 70 °C
Storage Temperature	-40 ~ 85 °C
Relative Humidity	Annual mean: <75% For 30 days, these days being spread in a natural manner over one year: 95%
IP Degree of Protection	IP30
Altitude	2000 m

Digital Output	
Voltage	5 ~ 30 V DC
Current	5 ~ 50 mA
Pulse Width	80 ms
Pulse Constant	100 imp/kWh, Settable

Power Supply	
Operating Range	100 ~ 240 V AC, 50/60 Hz, <5 VA, CAT III 100 ~ 300 V DC, <2 W, CAT III 9 ~ 36 V DC, <2 W

Standards Compliance	
Product Standard	
Product Standard	IEC 62053-41:2021
Safety Standard	UL 61010-1 ed.3, CAT III Pollution Level 2
Certification Standard	EN 50470-1: 2006; EN 50470-3: 2006
Electromagnetic Compatibility	
Fast Transients Immunity	IEC 61000-4-4
Surge Immunity	IEC 61000-4-5
Radiated Field Immunity	IEC 61000-4-3
Conducted Disturbances Immunity	IEC 61000-4-6
Radiated and Conducted Emission	EN 55032/CISPR 32 Class B

ORDERING INFORMATION

Model	Circuit	Voltage	Current	Power
CD560	S: Single Circuit	1500 V: Nominal Input Voltage 1500 V DC	A1: Shunt (50 ~ 75 mV)	P1: 100 ~ 240 V AC, 50/60 Hz, 100 ~ 300 V DC
	D: Dual Circuits	1000 V: Nominal Input Voltage 1000 V DC	A2: Voltage Hall Effect Sensor (0 ~ ±5 V/0 ~ ±4 V)	P2: 9 ~ 36 V DC
Ordering Example: CD560-S-1000V-A1-P2				

CD560 DC Smart Power and Energy Meter Ordering Information

Ordering Model	Specification Description	PN
CD560-S-1000V-A1-P2	Single Circuit, Nominal Input Voltage 1000 V DC, Current via Shunt, Power Supply 9~36 V DC	071930001
CD560-D-1000V-A1-P2	Dual Circuits, Nominal Input Voltage 1000 V DC, Current via Shunt, Power Supply 9 ~ 36 V DC	071930002
CD560-S-1500V-A1-P2	Single Circuit, Nominal Input Voltage 1500 V DC, Current via Shunt, Power Supply 9~36V DC	071930003
CD560-S-1500V-A2-P2	Single Circuit, Nominal Input Voltage 1500 V DC, Current via Hall Effect Sensor, Power Supply 9 ~ 36 V DC	071930004
CD560-S-1500V-A1-P1	Single Circuit, Nominal Input Voltage 1500 V DC, Current via Shunt, Power Supply 100 ~ 240 V AC, 50/60 Hz, 100 ~ 300 V DC	071930005
CD560-S-1500V-A2-P1	Single Circuit, Nominal Input Voltage 1500 V DC, Current via Hall Effect Sensor, Power Supply 100 ~ 240 V AC, 50/60 Hz, 100 ~ 300 V DC	071930006

Note:

The list shows regular model. If you need to configure other specified products , please contact us.

Shunt Connected to DC+, Order number add “-H”.

Example: CD560-S-1000V-A1-P2-H

Revision Date: Apr., 2024 V1.04

