

Three Phase Multifunction Din Rail Meter

SDM530C

User Manual V1.2



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SDM530C

Chapter 1. Product Overview

1.1 Product Introduction

The SDM530C is a three phase multi-function remote control energy meter. It measures all important electrical parameters, such as Active Energy (kWh), Current (A), Voltage (V), Frequency(Hz), Power Factor, Power Demand, import and export energy etc. With built-in relay inside, the meter can be remotely controlled to turn on or off the electricity supply via RS485. The user can also set alarm objects and alarm level, once the alarm is activated the relay will be turned off.

1.2 Product Feature

- Max.100A Direct Connect
- Multifunction Measurement, Displays Scrollable Settings
- Support AMR, SCADA system
- Remote Control with Built-in Relay
- Energy Resettable
- White Backlit LCD Display
- Din Rail Mounting 35mm

1.3 Application Scenarios

The SDM530C is suitable for scenarios where remote control switches are required.

Chapter 2. Technical Specification Parameters

2.1 Technical Parameters

Input Voltage:	Basic Voltage (Un):	230V AC L-N
	Operating Voltage Range:	±20% of Un
	Measurement Form:	RMS
Input Current:	Basic Current (Ib/ Iref):	5A
	Max. current(I _{max.}):	100A
	Over Current Withstand:	20 I _{max} for 0.5s
Input Frequency:		45-65 Hz
Insulation Capabilities:	AC voltage withstand:	4KV/1min
	Impulse Voltage Withstand:	6kV – 1.2μS waveform
Power Consumption:		≤ 2W
Pulse Port:		Can be Set (See Operating Instructions for Details)
Pulse Output Rate:		1000imp/kWh(Default)
Display:		LCD with White Backlit
Max reading:		999999.99 kWh

2.2 Measurement Accuracy

- ◆ Voltage: 0.5%
- ◆ Current: 0.5%
- ◆ Frequency: 0.1%
- ◆ Power Factor: 0.01
- ◆ Active Power: 0.5%
- ◆ Reactive Power: 1%
- ◆ Apparent power: 0.5%
- ◆ Active Energy: Class 0.5s
- ◆ Reactive Energy: Class 2

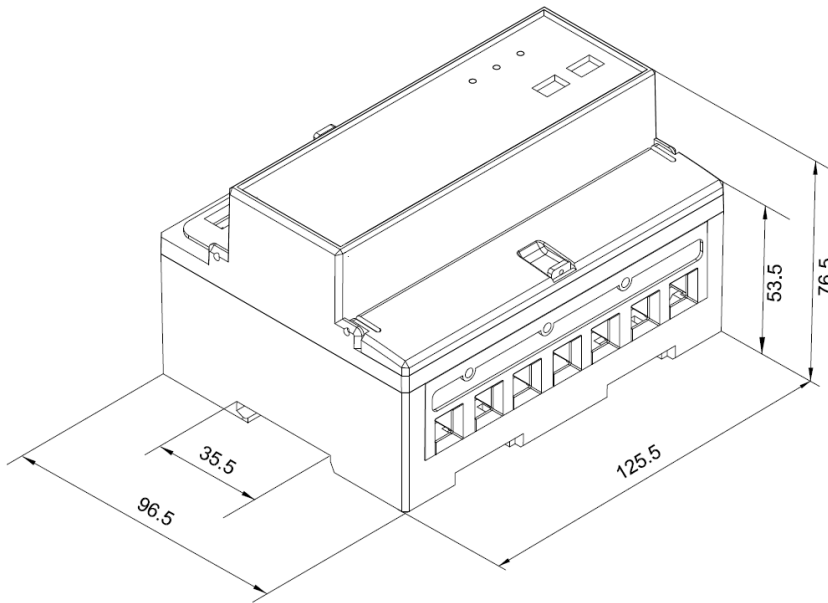
2.3 RS485 Communication

- ◆ Bus Type: RS485
- ◆ Protocol: Modbus RTU
- ◆ Baud Rate: 1200/2400/4800/9600bps (Default)
- ◆ Address Range: 1-247 (Default:1)
- ◆ Max. Bus loading: 64pcs
- ◆ Max. Bus loading: 1000m
- ◆ Parity: EVEN /ODD/NONE (Default)
- ◆ Data Bit: 8
- ◆ Stop Bit: 1

2.4 performance standard

- ◆ Operating Humidity: $\leq 90\%$
- ◆ Storage Humidity: $\leq 95\%$
- ◆ Operating Temperature: $-25^{\circ}\text{C}\sim+55^{\circ}\text{C}$
- ◆ Storage Temperature: $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$
- ◆ International Standard: GB-T 17215/ IEC62053-22/ EN50470-1/3
- ◆ Accuracy Class: Class 0.5S
- ◆ Installation Category: CATIII
- ◆ Protection against Penetration of Dust and Water : IP51 (Indoor)
- ◆ Insulating Encased Meter of Protective Class: II
- ◆ Altitude: $\leq 2000\text{m}$

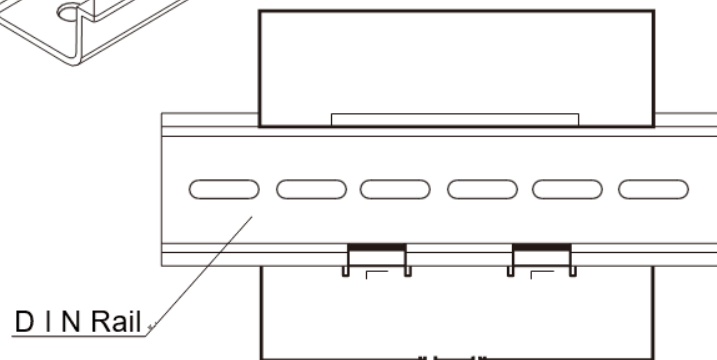
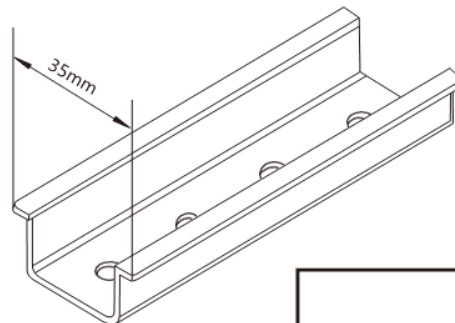
2.5 Dimensions



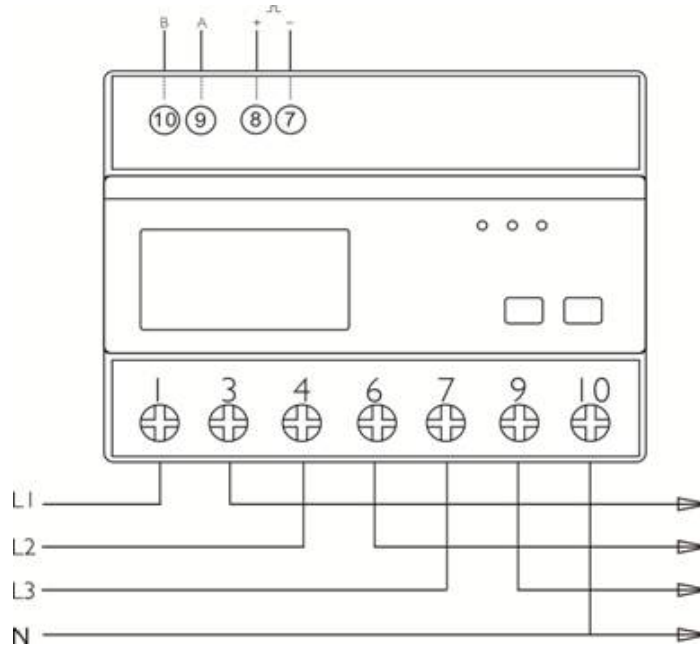
Height: 76.5mm

Width: 96.5mm

Length: 125.5mm



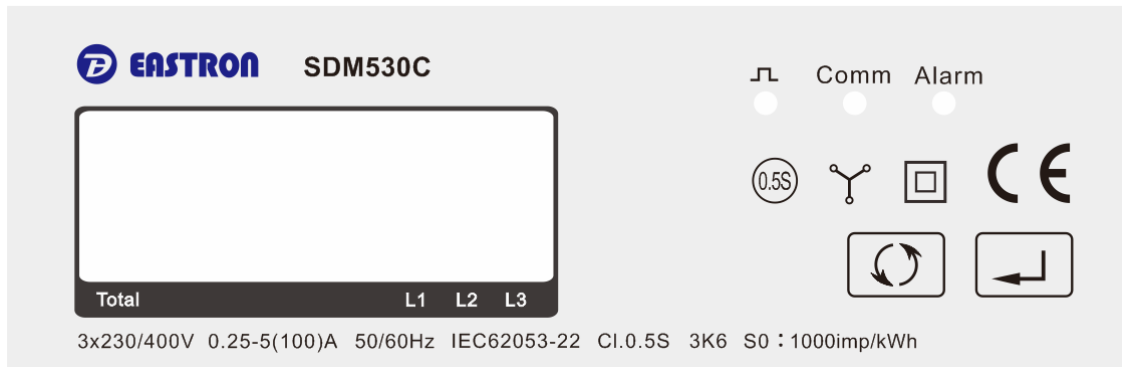
2.6 Wiring diagram



Chapter 3. Operating instructions

3.1 Panel Instructions and Key Operation Instructions



3.1.1 Panel Instructions



After the correct connection, it will enter the normal measurement state, and the screen is displayed as follows:

1st Screen	Start up Screens: All Display Segments
2nd Screen	Start up Screens: Software Version
Failure Interface	Display fault code: the display interface of fault code and normal display interface automatically display in turns, with the switching time of 3s. Err-01 indicates that the relay cannot close.






3.1.2 Key definition:




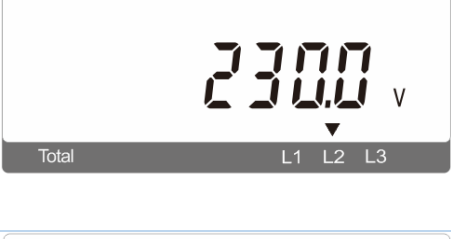
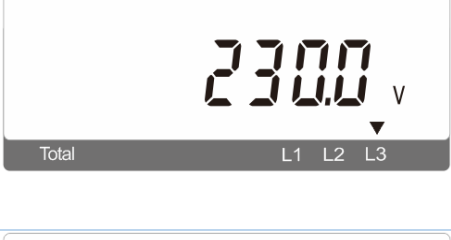


	<ul style="list-style-type: none"> ◆ Measurement mode: short press: switch the screen; ◆ Setting mode: short press: switch menu or single-digit increases at the same level; Long press: return to the previous menu.
	<ul style="list-style-type: none"> ◆ Measurement mode, short press: invalid; Long press: enter the setting mode; ◆ Setting mode, short press: move the cursor (the cursor flashing number for setting the state); Long press: menu item selection confirmation and parameter modification confirmation.



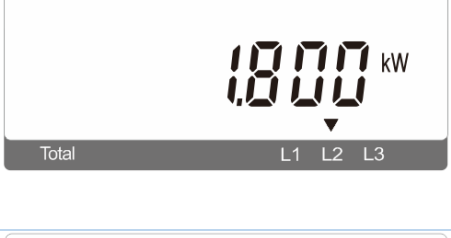


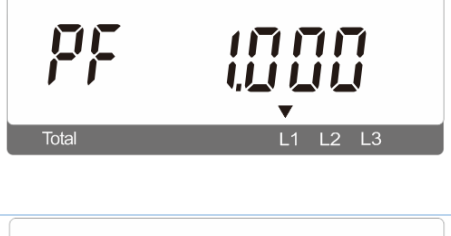
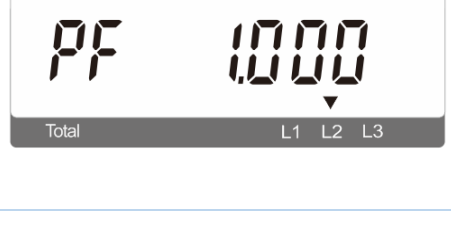
3.2 Measurement parameters



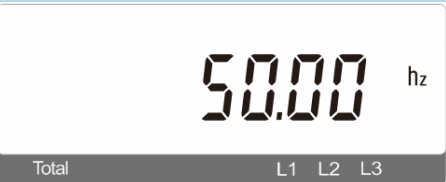



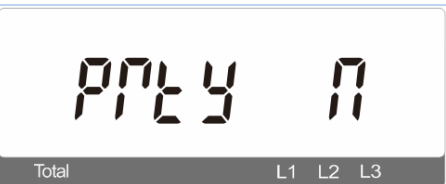
View by pressing the button:



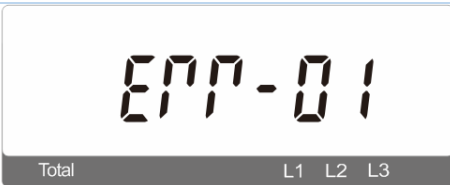



Total active energy→Import active energy→Export active energy→Total reactive energy→Import reactive energy →Export reactive energy→L1 Voltage→L2 Voltage→L3 Voltage→L1 Current →L2 Current →L3 Current →L1 Active power→L2 Active power→L3 Active power→Total Active power→L1 Power factor→L2 Power factor→L3 Power factor→Total Power factor→Frequency →Maximum total active power demand→ Communication Address → Communication Baud Rate → Communication Parity → Pulse Constant → Software Version

Page	Display	Description
1		Total active energy Example energy: 120.00kWh  Represents the relay is open
2		Import active energy Example: 60.00kWh
3		Export active energy Example: 60.00kWh
4		Total reactive energy Example: 200.00 kVarh


5		<p>Import reactive energy Example: 100.00 kVArh</p>
6		<p>Export reactive energy Example: 100.00kVArh</p>
7		<p>L1 Voltage Example: 230.0V</p>
8		<p>L2 Voltage Example: 230.0V</p>
9		<p>L3 Voltage Example: 230.0V</p>
10		<p>L1 Current Example: 50.809A</p>
11		<p>L2 Current Example: 50.809A</p>

12		L3 Current Example: 50.809A
13		L1 Active power Example: 1.800kW
14		L2 Active power Example: 1.800kW
15		L3 Active power Example: 1.800kW
16		Total Active power Example: 5.400kW
17		L1 Power factor Example: 1.000
18		L2 Power factor Example: 1.000

19		L3 Power factor Example: 1.000
20		Total Power factor Example: 1.000
21		Frequency Example: 50.00hz
22		Maximum total active power demand Example: 2.680kW
23		Communication Address Example: 001
24		Communication Baud Rate Example: 9600
25		Communication Parity Example: N(None) Note: N represents none; E represents even; O represents odd

26		<p>Pulse Constant Example: 1000imp/kWh The current output mode of the optocoupler pulse is total active energy mode</p>
27		<p>Software Version Example: 02 01.00</p>
28		<p>The failure interface Example: Err-01 Automatic display when the current fault occurs, and error-01 means that the relay cannot open.</p>
29		<p>Over-limit alarm interface In the measurement interface, the upper right corner appears  and  indicates that the measured value of the alarm object exceeds the alarm value. The relay can be closed manually or by modbus communication after the troubleshooting.</p>

3.3 Basic Setting

Long press "  for three seconds to enter the setting mode.







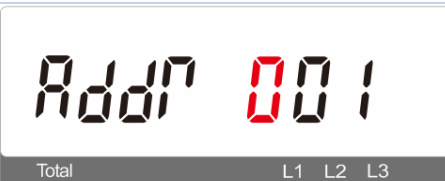



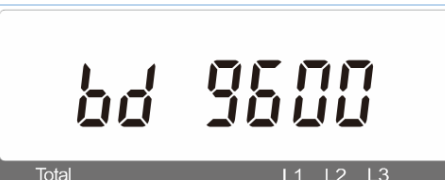




Note: If there is no operation in 1 minute under the setting mode, the meter will exit the setting interface and return to the display of total active power.


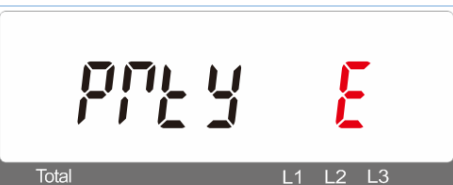














Instructions: Press the right button for 3s to enter into the setting mode, which is password protected and need to input the correct password.











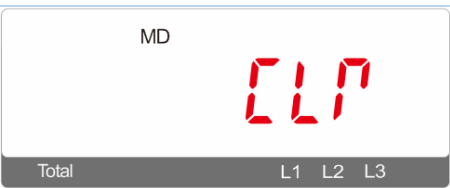


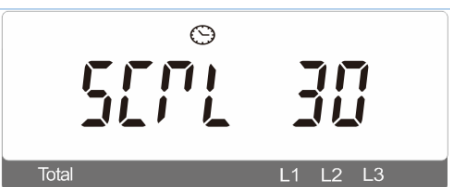
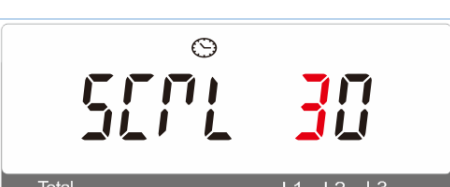




Under the setting mode, press the left button for 3s to exit the setting mode.

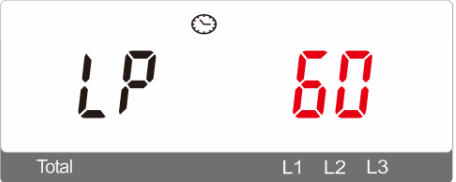






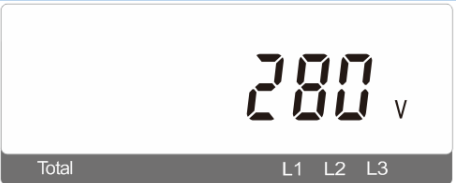

Under the setting mode, press the right button for 3s to enter/confirm the setting. Short press on the left button to choose the setting;


Under the setting mode, short press on the left button to scroll or change the setting item;

Page	Display	Description
1		Set successful, display: good
2		Setting failed, display: err
3		<p>Password Enter password into the Settings screen Default password: 1000 Press  select number, press  select shift. Then long press to enter the setup system.</p>
4		<p>Communication Address Default Communication Address : 001 Communication address range: 001~247</p>
4-1		Long press  into the communication address setting interface, the current character flashing. Then, press  select new communication address. Finally, long press  confirm Settings.
5		<p>Baud Rate Default baud rate: 9600bps Baud rate range: 1200, 2400, 4800, 9600.</p>
5-1		Long press  enter baud rate setting interface, the current character flashing. Then, press  select the new baud rate. Finally, long press  confirm Settings.

6		Parity Bit Default: None Optional: None, Even, Odd
6-1		Long press  enter the parity bit setting interface, the current character flashing. Then, press  select the new parity bit. Finally, long press  confirm Settings.
7		Pulse Constant Default: 1000imp/kwh Optional: 1000, 100, 10, 1.
7-1		Long press  into the constant setting interface, the current character flashing. Then, press  select the new constant. Finally, long press  confirm Settings.
8		pulse width Default: 100ms Optional: 200, 100, 60. If the pulse constant is equal to 1000imp/kWh, the setting interface cannot be set to 200ms at this time.
8-1		Long press  enter pulse width setting interface, the current character flashing. Then, press  select the new pulse width. Finally, long press  confirm Settings.
9		Pulse output type Default: P (Total active energy) Optional: P: total active energy Q: total reactive energy

9-1		<p>Long press  into the pulse output type setting interface, the current character flicker. current charact Then, press  select the new pulse output type. Finally, long press  confirm Settings.</p>
10		<p>Demand cycle Default: 60 min Demand cycle range: 0-60min. 0 represents real-time update demand.</p>
10-1		<p>Long press  to the demand period setting interface, the current character flicker. Then, select  a new demand cycle. Finally, long press  Settings.</p>
11		<p>Clear the maximum demand Enter this setting to clear the maximum demand.</p>
11-1		<p>Long press  enter the maximum demand reset setting interface, the current character flicker. Finally, long press  to confirm zero clearing.</p>
12		<p>Auto scroll display time Default: 0s (OFF) Rotation time range: 0~ 30s</p>
12-1		<p>Long press  enter auto wheel display time setting interface, the current character flicker. Then, press  select the new auto wheel display time. Finally, long press  confirm Settings.</p>
13		<p>Backlight lighting time Default: 60 min optional: off,on,5,10,20,30,60,120 Off means that the backlight is turn off; on means that the backlight is turn on.</p>

13-1		<p>Long press  into the backlit time setting interface, the current character flicker. Then, press  select the new backlight lighting time.</p> <p>Finally, long press  to confirm Settings.</p>
14		<p>User Password Default: 1000 optional: 0 ~ 9999</p>
14-1		<p>Long press  to enter the user password setting interface and the current character flashes. Then, click on  the new User Password.</p> <p>Finally, long press  to confirm Settings.</p>
15		<p>Check alarm information Enter this setting to check alarm associated information: Voltage 、 Current 、 Active power 、 reactive power 、 apparent power、 Frequency</p>
15-1		<p>Alarm object Default: NULL (No alarm object) Note: this option can only be set via communication</p>
15-2		<p>Alarm Value Default: 100000.0 Note: this option can only be set via communication</p>
15-3		<p>Relay Control The display status of this option is off for relay open and on for relay close. This option can be set only if the alarm occurs when the relay automatically disconnects. Set relay close through this option, which means manually disarming the alarm. Therefore, before you do this, make sure the alarm object is troubleshooting.</p>

15-3-1		<p>Long press  enter relay status setting interface, current character flicker. Then, press  select the new relay status. Finally, long press  to confirm settings..</p>
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Chapter 4. Communication Introduction

4.1 Input register, function code (Hex) : 04

Register	Enter register parameters				Register start address Hex	
	parameter-definition	data length (bytes)	Data format	data length (bytes)	high byte	low byte
30001	L1-N Voltage	4	Float	V	00	00
30003	L2-N Voltage	4	Float	V	00	02
30005	L3-N Voltage	4	Float	V	00	04
30007	L1 Current	4	Float	A	00	06
30009	L2 Current	4	Float	A	00	08
30011	L3 Current	4	Float	A	00	0A
30013	L1 Active power	4	Float	W	00	0C
30015	L2 Active power	4	Float	W	00	0E
30017	L3 Active power	4	Float	W	00	10
30019	L1 apparent power	4	Float	VA	00	12
30021	L2 apparent power	4	Float	VA	00	14
30023	L3 apparent power	4	Float	VA	00	16
30025	L1 reactive power	4	Float	VAr	00	18
30027	L2 reactive power	4	Float	VAr	00	1A
30029	L3 reactive power	4	Float	VAr	00	1C
30031	L1 Power factor (1)	4	Float	None	00	1E
30033	L2 Power factor (1)	4	Float	None	00	20
30035	L3 Power factor (1)	4	Float	None	00	22
30037	L1 phase angle	4	Float	Degrees	00	24
30039	L2 phase angle	4	Float	Degrees	00	26
30041	L3 phase angle	4	Float	Degrees	00	28
30043	Average phase voltage	4	Float	V	00	2A
30047	Average Current	4	Float	A	00	2E
30049	Total Current	4	Float	A	00	30
30053	Total Active power	4	Float	W	00	34
30057	Total apparent power	4	Float	VA	00	38
30061	Total reactive power	4	Float	VAr	00	3C
30063	Total Power factor (1)	4	Float	None	00	3E
30067	Total phase angle	4	Float	Degree	00	42
30071	Frequency	4	Float	Hz	00	46
30073	Import Total active energy	4	Float	kWh	00	48
30075	Export Total active energy	4	Float	kWH	00	4A
30077	Import Total reactive energy	4	Float	kVArh	00	4C
30079	Export Total reactive energy	4	Float	kVArh	00	4E
30081	Total Apparent power	4	Float	kVAh	00	50
30085	Total Active power demand (2)	4	Float	W	00	54
30087	Max.Active power demand (2)	4	Float	W	00	56
30101	apparent power demand	4	Float	VA	00	64
30103	Max.apparent power demand	4	Float	VA	00	66
30109	Total reactive power demand (2)	4	Float	VAr	00	6C
30111	Max.reactive power demand (2)	4	Float	VAr	00	6E
30201	L1-2 Voltage	4	Float	V	00	C8

30203	L2-3 Voltage	4	Float	V	00	CA
30205	L3-1 Voltage	4	Float	V	00	CC
30207	Average line Voltage	4	Float	V	00	CE
30225	Null line Current	4	Float	A	00	E0
30259	L1 Current demand	4	Float	A	01	02
30261	L2 Current demand	4	Float	A	01	04
30263	L3 Current demand	4	Float	A	01	06
30265	L1 Max.Current demand	4	Float	A	01	08
30267	L2 Max.Current demand	4	Float	A	01	0A
30269	L3 Max.Current demand	4	Float	A	01	0C
30343	Total active energy	4	Float	kWh	01	56
30345	Total reactive energy	4	Float	kVArh	01	58

Remark:

(1) the Power factor display will be adjusted automatically according to the Current direction.

Negative value indicates export Current, while positive value represents import Current.

(2) The default power demand = the forward value - the reverse value.

4.2 Keep register, function code (Hex) : 03 / 10

Register	Parameter	Register start address (Hex)		Description	mode
		high byte	low byte		
40003	Demand cycle	00	02	The set range:0~60 Unit: minute Default:60. 0 represent real time updates, i.e. update every second. data length : 4 byte data type : Float	r/w
40005	Sliding time	00	04	The set range: 1 ~ (demand cycle-1) unit:min Default1. data length : 4 byte data type : Float	r/w
40013	Pulse 1 output pulse width	00	0C	The set range: 60, 100, 200 Unit : ms Default: 100. Note: if Pulse Constant of pulse 1=1000imp/kWh, the pulse width will be fixed at 35mS and is not configurable. data length : 4 byte data type : Float	r/w
40019	Parity and stop bit	00	12	Set range: 0~3; Default: 0 0 = 1 stop bit, none parity. 1 = 1 stop bit, even parity; 2 = 1 stop bit, odd parity; 3 = 2 stop bits, none parity. data length : 4 byte data type : Float	r/w
40021	Modbus address	00	14	The set range: 1~247, Default1 data length : 4 byte data type : Float	r/w
40023	Pulse1 Pulse Constant	00	16	The set range: 0~3; Default: 0 0 = 1000 imp/kWh 1 = 100 imp/kWh 2 = 10 imp/kWh 3 = 1 imp/kWh Note: if the Pulse width of Pulse 1 is 200ms, Pulse Constant cannot be set to 1000 imp/kWh.	r/w

				data length : 4 byte data type : Float	
40025	Password	00	18	The set range 0000 ~ 9999. Default1000 data length : 4 byte data type : Float	r/w
40029	Baud rate	00	1C	Baud rate could be set to: 0, 1, 2, 5, Default2. 0 = 2400 bps 1 = 4800 bps 2 = 9600 bps 5 = 1200 bps data length : 4 byte data type : Float	r/w
40059	Automatic rotation time (Display)	00	3A	The set range 0~30; Default: 0. unit: s 0 = Automatic rotation display off. data length : 4 byte data type : Float	r/w
40061	Backlight time	00	3C	The set range 0 ~ 121; Unit: minute Default: 60. 0 = the backlight is always on; 121 = the backlight is always off data length : 4 byte data type : Float	r/w
40087	Pulse 1 output type	00	56	Values can be set: 2, 6, Default2. 2 = Total active energy. 6 = Total reactive energy. data length : 4 byte data type : Float	r/w
41025	Alarm object (1)	04	00	The set range: 0~5, and 255; Default: 255. 255 = no alarm object is associated. data length : 2 byte data type : unsigned int16	r/w
41027	Alarm value	04	02	The threshold value of the alarm is triggered. When the measured value of the alarm object is greater than the threshold value, the alarm is triggered and the relay will be automatically disconnected. Note: After an alarm occurs and the relay is automatically disconnected, it is necessary to manually issue a command to control the relay and close it to release the alarm. data length : 4 byte data type : Float	r/w
461457	Clear historical data	F0	10	00, 00 = reset Max. demand info. data length: 2 byte data type: Hex	wo
463777	Measurement mode	F9	20	The value can be set: 00 01 ~ 00 05 00 01 : total kWh = Import kWh 00 02 : total kWh = Import kWh + Export kWh 00 03 : total kWh = import kWh – Export kWh 00 04 : total kWh = Export kWh 00 05: total kWh = Export kWh – Import kWh data length : 2 byte data type: Hex	r/w
464511	Meter fault code	FB	FE	00 00 Represents error free 00 01 Represents the relay of Phase A cannot be open 00 02 Represents the relay of PhaseB cannot be open 00 03 Represents the relay of Phase A, B cannot be open 00 04 Represents the relay of Phase C cannot be open 00 05 Represents the relay of Phase A, C cannot be open 00 06 Represents the relay of Phase B, C cannot be open 00 07 Represents the relay of Phase A,B,C cannot be open Length : 2 byte Data Format : Hex Note: Only read.	ro

464513	serial number	FC	00	serial number of meter data length : 4 byte data type : unsigned int32	ro
464769	Relay control command	FD	00	Values can be set: 00 00, FF 00. FF 00 = to control the relay close together; 00 00 = to control the relay open together; Note: when the alarm occurs, the relay needs to be closed through the command to remove the alarm. Length : 2 byte Data Format : Hex	wo
464771	Relay independent control command	FD	02	The first byte represents relay of phase A The second byte represents relay of phase B The third byte represents relay of phase C The fourth byte is reversed. It need to be written 00 when setting and return 00 when reading. Note: When setting, written FF represents control the relay to ON status, 00 represents control the relay to OFF status. When reading, return FF represents the current relay status is ON. Return 00 represents the current relay status is OFF. Length: 4 bytes Data Format: Hex	wo

Note:

(1) Table-1 Alarm object

reference number	Alarm parameter	reference number	Alarm parameter	reference number	Alarm parameter
0	L1-N Voltage	10	L3 Current	20	Total reactive power
1	L2-N Voltage	11	Average Current	21	L1 apparent power
2	L3-N Voltage	12	Null line Current	22	L2 apparent power
3	Average phase Voltage	13	L1 Active power	23	L3 apparent power
4	L1-2 Voltage	14	L2 Active power	24	Total apparent power
5	L2-3 Voltage	15	L3 Active power	25	Frequency
6	L3-1 Voltage	16	Total Active power		
7	Average line Voltage	17	L1 reactive power		
8	L1 Current	18	L2 reactive power		
9	L2 Current	19	L3 reactive power		

4.3 Read the coil status, function code (Hex) : 01

register serial number	parameter	Register start address (Hex)		values indicating	mode
		high byte	low byte		
00001	DO-1 status	00	00	1 means close and 0 means open Note: DO-1 represents the relay of phase A. data length : 1 bit data type: Binary	read only
00002	DO-2 status	00	01	1 means close and 0 means open Note: DO-2 represents the relay of phase B. data length : 1 bit data type: Binary	read only
00003	DO-3 status	00	02	1 means close and 0 means open Note: DO-3 represents the relay of phase C. data length : 1 bit data type: Binary	read only

4.4 Control coil, function code (Hex) : 05

register serial number	parameter	Register start address (Hex)		values indicating	mode
		high byte	low byte		
		00	01		
		00	02		
00001	DO-1 control	00	00	FF 00 = to contro the relay colse; 00 00 =to control the relay open; Note: DO-1 represents the relay inside the meter data length :2 byte data type :Hex	wo
00002	DO-2 control	00	01	FF 00 represents to close relay; 00 00 represents to open relay; Note: DO-2 represents the relay of phase B data length :2 byte data type :Hex	wo
00003	DO-3 control	00	02	FF 00 represents to close relay; 00 00 represents to open relay; Note: DO-3 represents the relay of phase C data length :2 byte data type :Hex	wo

4.5 For example

Read the input register

Example: read "L1 -- NVoltage"

Send: 01 04 00 00 00 02 71 CB

Where, 01 = modbus address of the meter

04 = function code

00 = high byte of register start address

00 = low byte of register start address

00 = high byte of register number

02 = low byte of register number

71 = low byte of CRC check code

High byte of CB = CRC check code

Return: 01 04 04 43 66 33 34 1B 38

Where, 01 = modbus address of the meter

04 = function code

04 = number of bytes returned

43 = data, (high bytes of high word)

66 = data, (low bytes of high word)

33 = data, (high bytes of low word)

34 = data, (low bytes of low word)

1B = low byte of CRC check code

38 = high byte of CRC check code

Note: 43 66 33 34(Hex) = 230.2 (Floating point)

2. Read hold register

Example: read "slip time"

Send: 001 03 0004 0002 85 CA

Where, 01 = modbus address of the meter

03 = function code

00 = high byte of register start address

04 = low byte of register start address

00 = high byte of register number

02 = low byte of register number

85 = low byte of CRC check code

CA = high byte of CRC check code

Return: 01 03 04 40 A0 00 00 EF D1

Where, 01 = modbus address of the meter

03 = function code

04= number of bytes returned

40 = data, (high byte of high word)

A0 = data, (low bytes of high word)

00 = data, (high bytes of low word)

00 = data, (low byte of low word)

EF = low byte of CRC check code

D1 = high byte of CRC check code

Note: 40 A0 00 00 (Hex) = 5 (Floating point)

3. Write hold register

Example: set the "demand cycle" = 60 min

Send: 01 10 00 02 00 02 04 42 70 00 00 00 67 D5

Where, 01 = modbus address of the meter

10 = function code

00 = high byte of register start address

02 = low byte of register start address

00 = high byte of register number

02 = low byte of register number

04 = number of bytes written to data

42 = data, (high byte of high word)

70 = data, (low bytes of high word)

00 = data, (high bytes of low word)

00 = data, (low byte of low word)

67 = low byte of CRC check code

D5 = high byte of CRC check code

Note: 42 70 00 00 (Hex) = 60 (Floating point)

Return: 01 10 00 02 00 02 E0 08

Where, 01 = modbus address of the meter

10 = function code

00 = high byte of register start address

02 = low byte of register start address

00 = high byte of register number

02 = low byte of register number

E0 = low byte of CRC check code

08 = high byte of CRC check code

4. Read the line status

Example: read DO-1 status

Send: 01 01 00 00 00 01 FD CA

Where, 01 = modbus address of the meter

01 = function code

00 = high byte of register start address

00 = low byte of register start address

00 = reads the number of high bytes of DO

01 = read the low number of DO bytes

FD = low byte of CRC check code

CA = high byte of CRC check code

Return: 01 01 01 01 E0 50

Where, 01 = modbus address of the meter

01 = function code

01 = the number of bytes returned

01 = data (DO state)

E0 = low byte of CRC check code

50 = high byte of CRC check code

Description: data 0x01 = 0000 0001 (Binary Value).

Bit 0 stands for DO-1 status.

Bit0 = 1, which means DO-1 is closed;

Bit0 = 0, which means DO-1 is disconnected.

5. Control line

Example: control DO-1 becomes closed

Send: 01 05 00 00 FF 00 8C 3A

Where, 01 = modbus address of the meter

05 = function code

00 = high byte of register start address

00 = low byte of register start address

FF = DO controls high data bytes

00 = DO control command data low byte

8C = low byte of CRC check code

3A = high byte of CRC check code

Return: 01 05 00 00 FF 00 8C 3A

Where, 01 = modbus address of the meter

05 = function code

00 = high byte of register start address

00 = low byte of register start address

FF = DO controls high data bytes

00 = DO control command data low byte

8C = low byte of CRC check code

3A = high byte of CRC check code

IF you have any question, please feel free to contact our sales team.

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