Three Phase Multifunction Din Rail Meter SDM530Y

User Manual V1.1



Eastron Europe Limited



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Catalogue

Chapter One. Product Overview	
1.1 Product Introduction	
1.2 Product Feature	
1.3 Application Scenarios	3
Chapter Two. Technical Specification Parameters	
2.1 Technical Parameters	
2.2 Measurement Accuracy	
2.3 RS485 Communication	
2.4 Performance Standard	5
2.5 Outline and Dimension	
2.6 Wiring Diagram	
Chapter Three. Operating instructions	
3.1 Panel Instructions and Key Operation Instructions	7
3 1.1 Panel Instructions	7
3 1.2 key Definitions	
3.2 Prepaid Function Description	
3 2.1 Electricity Purchase	
3 2.2 Electricity Use	
3 2.3 Meet an Emergency	3
3.3 Measurement Parameters	8
3.4 Basic Setting	10
Chapter Four. Communication Introduction	
4.1 Input Register, Function Code (Hex): 04	13
4.2 Keep Register, Function Code (Hex): 03 /10	14
12 For oxample	4



SDM530Y

Chapter One. Product Overview

1.1 Product Introduction

SDM530Y prepaid energy meter is EASTRON's latesy model of three phase electronic prepaid energy meter. It is in full compliance with technical requirements of IEC62053-22 standard for Class 0.5S energy meter. It has a complete prepaid management system, which is convenient for power purchase. The system automatically deducts fees according to electricity consumption. Recharding operation can be done throught network remotely, no need any medium such as IC card. The meter has two-level balance alarm function and an emergency amount function. It will automatically stop power supply when tenant in arrears or credit become zero or reaching the pre-set value and the real-time monitoring the look whether there is any abonormal situation.

The meter is with excleent reliability that can display remaining capacity, available remaining, total power consumption/ purchase of electricity, credit line, overdraft consumption, load threshlod, pay model, voltage, current, active power, active energy, import energy, export energy, power factor, frequency and time ect. The reactive power, apparent power can be read by Modbus.

SDM530Y is easy to install with nice appearance, small and light. With battery installed inside the meter, the value on the meter still can be read when grid power off.

SDM530Y is suitable for real-time power monitoring system and has the characteristics of multi-function, multi-purpose, high stability and long life.

The meter has 1 pulse output, and the pulse constant, pulse width and output unit all can be set. It has RS485 communication interface, support high speed communication function of RS485 (9600bps). It is an ideal choice for power energy monitoring.

1.2 Product Feature

- Max.100A Direct Connect
- Multifunction Measurement, Displays Scrollable Settings
- Support AMR, SCADA system
- Prepaid Function
- Energy Resettable
- White Backlit LCD Display
- Din Rail Mounting 35mm

1.3 Application Scenarios

SDM530Y is a multifunctional power meter designed to address the needs of small and medium power users/commercial households with high mobility and tendency to owe fees. It can be applied to Ac charging posts, solar photovoltaic, etc. Its complete communication function makes it suitable for various real-time power monitoring systems.

Chapter Two. Technical Specification Parameters

2.1 Technical Parameters

◆ Input Voltage: Basic Value: 230V AC



Operating Voltage Range: ±20%Basic Value

Measurement Form: Valid Values

◆ Input Current: Basic Value: 5A

Max.Current: 100A

Over Current Withstand: 20 Imax for 0.5s

◆ Input Frequency: Basic Value: 50/60Hz

Input Frequency Range: 45-65 Hz

◆ Insulation Capabilities: - ACvoltage 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: 64pcsMax. Bus loading: 1000m

Parity: EVEN /ODD/NONE (Default)

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Data Bit: 8Stop Bit: 1

2.4 performance standard

◆ Operating Humidity: ≤90%◆ Storage Humidity: ≤95%

◆ Operating Temperature: -25°C~+55°C

◆ Storage Temperature: -40°C~+70°C

◆ International Standard: GB-T 17215/IEC62053-22/EN50470-1/3

Accuracy Class: Class 0.5SInstallation Category: CATII

Protection against Penetration of Dust and Water: IP51 (Indoor)

◆ Insulating Encased Meter of Protective Class: II

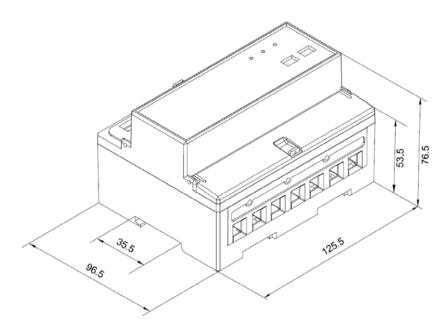
◆ Altitude: ≤2000m

2.5 Dimensions

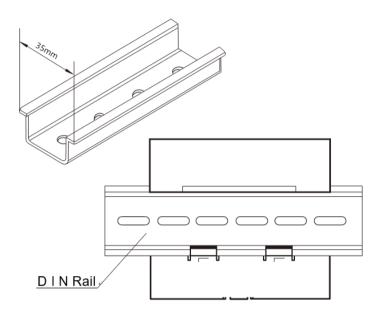
Height: 76.5 mm

Width: 96.5 mm

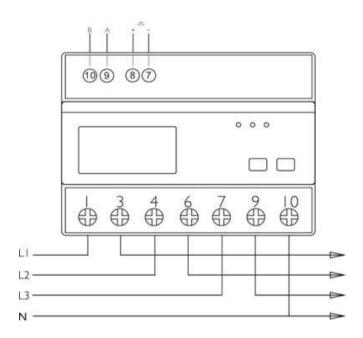
Length: 125.5mm







2.6 Wiring diagram





Chapter Three. Operating instructions

3.1 Panel Instructions and Key Operation Instructions

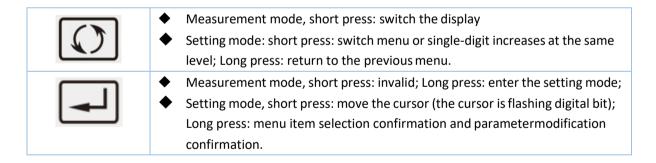
3.1.1 Panel Instructions



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	Display fault code: the display interface of fault code and normal display interface
Interface	automatic scrolling display, with the switching time of 3s.Error-01 indicates that the
	relay cannot close.

3.1.2 key Definitions:



3.2 Prepaid Function Description

This function needs to be used in conjunction with the company's prepaid management system software (see the detailed software operation instructions of the prepaid management system software). Description of alarm threshold and emergency amount:

The meter has a two-level balance alarm threshold, called the first-level alarm threshold and second-level alarm threshold. In which the first-level alarm threshold value is higher than the second-level alarm threshold value. That is, the first-level alarm value is triggered first when the balance is insufficient.

The meter has the function of emergency amount. When the emergency amount is set to a value higher than 0, the emergency function is activated, means, the user is allowed to overdraw a certain amount of expenses. If the user has used the emergency amount, and when the user buy electricity, the



used emergency amount will be deducted first, and the remaining electricity charge will be charged to the meter.

Turn off this function when the emergency amount is set to 0.

3.2.1 Electricity Purchase:

The user goes to the administrative department of selling electricity to deal with the electricity purchase business.

3.2.2 Electricity Use:

When the remaining amount of the meter is less than the first alarm value, the buzzer is on and the alarm indicator starts flashing. If the user presses any button, the buzzer is turned off, but the alarm indicator remains flashing. If the user does not press any button, the buzzer alarm will automatically shut down after 10 minutes. The function reminds users that the amount is insufficient and needs to be topped up.

If the value is not charged at this time, when the remaining amount of the meter is less than the second-level alarm value, the relay will open and the buzzer will be turned on at the same time. In the mean while, the alarm indicator light becomes normally on; If the user presses any button, the relay is switched on and the buzzer is turned off. The alarm indicator remains on. If the user does not press any key, the buzzer alarm will automatically shut down after 10 minutes, but the relay clock will remain open until the user presses any key. This function alerts the user that need to recharge immediately.

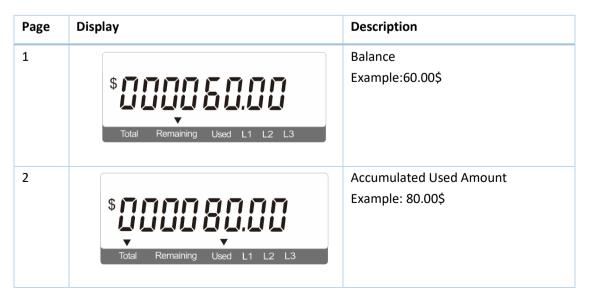
3.2.3 Meet an Emergency:

When the remaining amount of the meter goes to 0, the relay will be automatically disconnected and cut off. If the emergency amount function is not turned on, the relay is always disconnected. If the emergency amount function is turned on, the meter will be automatically connected to the relay after the user presses any key, and the relay will be automatically disconnected after the user has consumed the emergency amount.

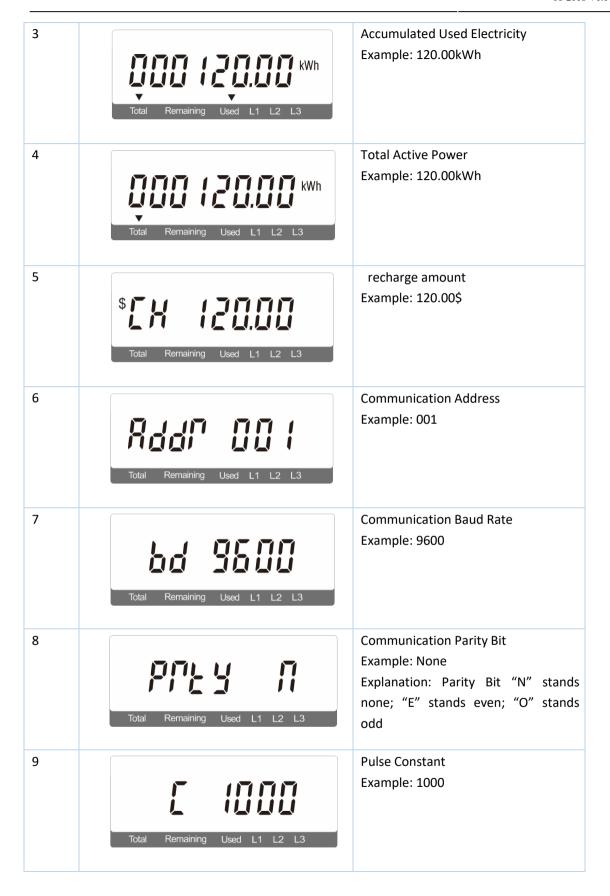
3.3 Measurement Parameters

It can be viewed by pressing thebutton:

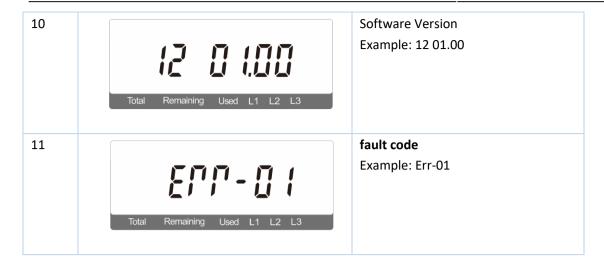
Balance→ Accumulated Used Amount → Accumulated Used Electricity → Total Active Power → recharge amount → Communication Address → Communication Baud Rate → Communication Parity Bit → Pulse Constant → Software Version









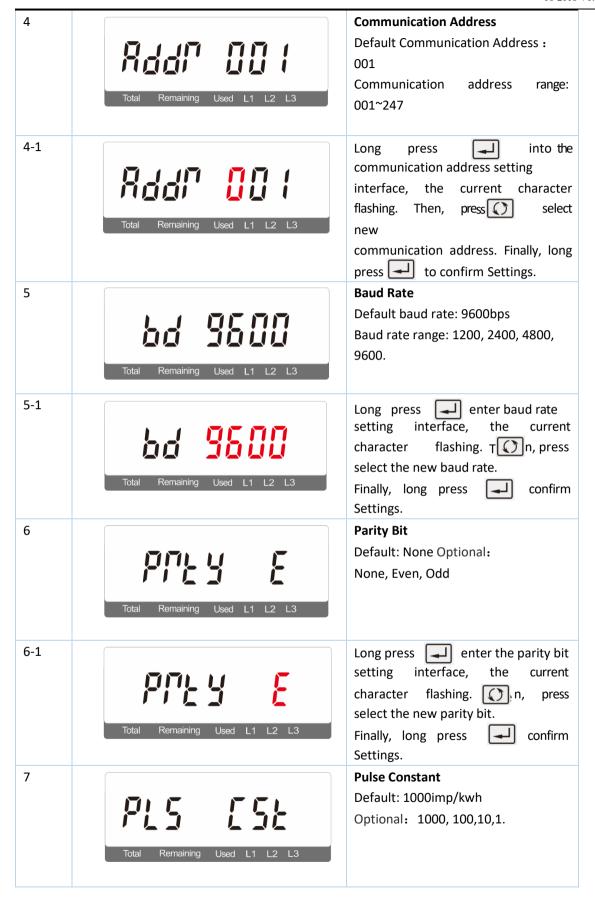


3.4 Basic Setting

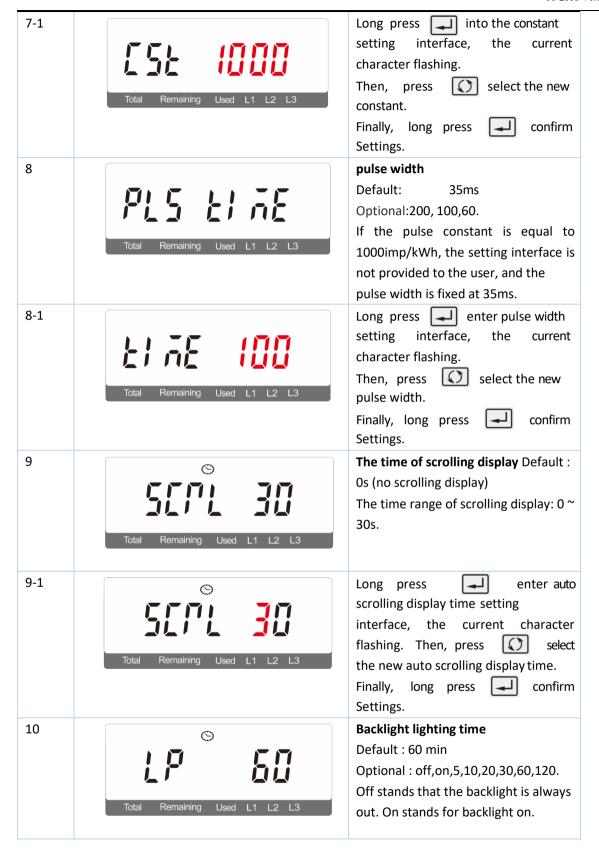
Long press " for three seconds to enter the setting mode (It will exit the setting interface if there is no operation in the next minute andreturn the remaining amount interface):

Page	Display	Description
1	Total Remaining Used L1 L2 L3	Set successful, display: good
2	Total Remaining Used L1 L2 L3	Setting failed, display: err
3	Total Remaining Used L1 L2 L3	Password Enter password into the Settings screen Default password: 1000 Press Select number, press select shift. Then long press to enter the setup system.

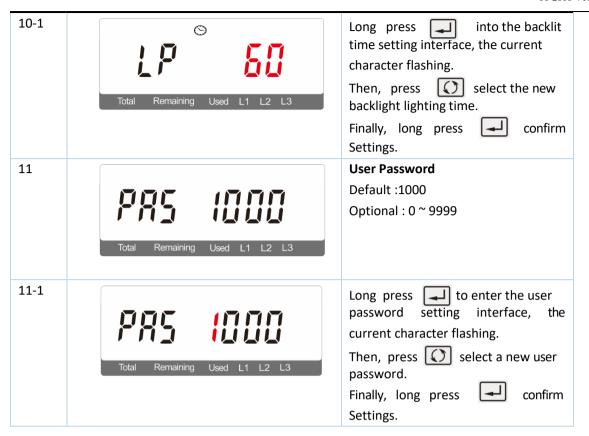












Chapter Four. Communication Introduction 4.1 Input Register, Function Code (Hex): 04

Register	Enter Register I	Register start address Hex				
Serial Number	Parameter Definition	Data length (bytes)	Data Format	Unit	High Byte	Low Byte
30343	Total Active Power 4 Float kWh				01	56
33841	Accumulated Used Electricity	4	Float	kWh	0F	00
33851	Balance of the meter	4	Float	\$	0F	0A
33853	The sum of the accumulated recharge of the meter	4	Float	\$	OF	ОС
33855	Last time recharge amount of the meter	4	Float	\$	OF	OE
33857	Accumulated Used Amount	4	Float	\$	0F	10

4.2 Keep Register, Function Code (Hex): 03/10



Register Serial Parameter				Patter
Parameter	High	Low	The value description	n
	Byte	Byte		
Pulse 1 output pulse width	00	oc	Set range: 60, 100, 200, Unit:ms, Default:35. Note: If the pulse constant of pulse 1 =1000imp/kWh, Then the automatic fixation is 35ms, can't be set. Data length: 4 byte Data type: Float	Read/ Write
Parity bit and stop bit	00	12	Set range: 0~3, Default 0 0 Stands for 1 stop bit, no parity: 1 Stands for 1 stop bit, even parity; 2 Stands for 1 stop bit, odd parity; 3 Stands for 2 stop bit, no parity. Data length: 4 byte Data type: Float	Read/ Write
Modbus address	00	14	Set range: 1~247, Default 1 Data length: 4 byte Data type: Float	Read/ Write
Pulse 1 pulse constant	00	16	Set range 0~3, Default 0 0 Stands for 1000 imp/kWh 1 Stands for 100 imp/kWh 2 Stands for 10 imp/kWh 3 Stands for 1 imp/kWh Note: if the pulse constant of pulse 1=1000imp/kWh, it is automatically fixed to 35ms, cannot be set. Data length: 4 byte Data type: Float	Read/ Write
Password	00	18	Set range 0000 ~ 9999, Default1000 Data length: 4 byte Data type: Float	Read/ Write
Baud rate	00	10	Settable value: 0, 1, 2, 5, Default2. 0 Stands for 2400 bps 1 Stands for 4800 bps 2 Stands for 9600 bps 5 Stands for 1200 bps Data length: 4 byte Data type: Float	Read/ Write
Automatic scrolling display	00	3A	Set range 0~30, unit: second, Default0. 0 Stands for no scrolling display. Data length: 4 byte Data type: Float	Read/ Write
	Parity bit and stop bit Modbus address Pulse 1 pulse constant Password Baud rate	Parameter High Byte Pulse 1 output pulse width Parity bit and stop bit Modbus address O0 Pulse 1 pulse constant Password O0 Automatic O0 Automatic O0	Pulse 1 output pulse width 00 OC Parity bit and stop bit 00 12 Modbus address 00 14 Pulse 1 pulse constant 00 16 Password 00 18 Baud rate 00 1C	Parameter High Low Byte Byte Set range: 60, 100, 200. Unitims, Default:35. Note: If the pulse constant of pulse 1 =1000imp/kWh. Then the automatic fixation is 35ms, can't be set. Data length: 4 byte Data type: Float Set range: 0°3. Default Sot pobit Parity bit and stop bit Parity bit and stop bit Modbus address Oo 14 Pulse 1 pulse constant Pulse 1 pulse constant Pulse 1 pulse constant Pulse 1 pulse constant Oo 15 Password Oo 16 Password Oo 17 Password Oo 18 Baud rate Oo 17 Automatic scrolling display Automatic scrolling display Oo 3A Set range: 60, 100, 200. Unitims, Default:35. Note: If the pulse constant of pulse 1 =1000imp/kWh. Then the automatic fixation is 35ms, can't be set. Data length: 4 byte Data type: Float Set range: 0°3. Default 0 O Stands for 1 stop bit, no parity. Data length: 4 byte Data type: Float Set range: 1°247. Default 1 Data length: 4 byte Data type: Float Set range: 1°247. Default 0 O Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 2 Stands for 1000 imp/kWh 3 Stands for 1000 imp/kWh 3 Stands for 1000 imp/kWh 5 Stands for 1000 imp/kWh 5 Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 2 Stands for 1000 imp/kWh 3 Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 2 Stands for 1000 imp/kWh 3 Stands for 1000 imp/kWh 1 Stands for 1000 imp/kWh 2 Stands for 1000 imp/kWh 1 Stand



40061	Backlight time	00	3C	Set range 0 ~ 121, unit: minute, Default60. 0 Stands for Backlight normally on; 121 Stands for Backlight normally off. Data length: 4 byte Data type: Float	Read/ Write
41281	Current recharge information	05	00	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41291	The last recharge information	05	0A	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41301	The last two recharge information	05	14	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only
41311	The last three recharge informatiowww.ea stroneurope.com	05	1 E	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



	1		1	T	1
41321	The last four recharge information	05	28	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41331	The last five recharge information	05	32	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only
41341	The last six recharge information	05	3C	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41351	The last seven recharge information	05	46	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



	The last eight			 Recharge amount, length: 4byte, data format: Float The time recharge occurs, length: 6byte, data format: BCD, 	Only
41361	recharge	05	50	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	reau
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
				2) The time recharge occurs, length: 6byte, data	
	The last nine			format: BCD,	Only
41371	recharge	05	5A	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	Teau
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
				2) The time recharge occurs, length: 6byte, data	
	The last ten			format: BCD,	Only
41381	recharge	05	64	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	read
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
				2) The time recharge occurs, length: 6byte, data	
	The last eleven			format: BCD,	Only
41391	recharge	05	6E	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20, 42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	



41401 recharge	The last twelve recharge information	recharge 05		1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	Only read
				C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	
41411	The last thirteen recharge information	05	82	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41421	The last fourteen recharge information	05	8C	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41431	The last fifteen recharge information	05	96	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



				A) Barbarra arrayat lan it di a la fa i	
				1) Recharge amount, length: 4byte, data format:	
				Float	
				2) The time recharge occurs, length: 6byte, data	
	The last sixteen	_	_	format: BCD,	Only
41441	recharge	05	A0	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
	seventeen			format: BCD,	Only
41451	recharge	05	AA	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
	illollilation			C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	Only
	The last			2) The time recharge occurs, length: 6byte, data	
	eighteen recharge information			format: BCD,	
41461		05	B4	Year-Month-Date-Hour-Minute-Second	
				For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	read
	iiioiiilatioii			C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	Tholog			2) The time recharge occurs, length: 6byte, data	
	The last			format: BCD,	Orales
41471	nineteen	05	BE	Year-Month-Date-Hour-Minute-Second	Only
	recharge			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
	information			C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	



41481	The last twenty recharge information	05	C8	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41491	The last twenty-one recharge information	05	D2	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41501	The last twenty-two recharge information	05	DC	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41511	The last twenty-three recharge information	05	E6	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
44504	twenty-four	0.5	F0	format: BCD,	Only
41521	recharge	05	F0	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
	twenty-five		FA	format: BCD,	Only
41531	recharge	05		Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	Only read
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
	twenty-six recharge information		04	format: BCD,	
41541		06		Year-Month-Date-Hour-Minute-Second	
				For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
	in ormation			C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
				format: BCD,	Oralis
41551	twenty-seven	06	0E	Year-Month-Date-Hour-Minute-Second	Only
	recharge information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
	iniormation			C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	



41561	The last twenty-eight recharge information	06	18	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only
41571	The last twenty-nine recharge information	06	22	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41581	The last thirty recharge information	06	2C	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for2018.7.16, 13 12 20 Stands for13:12:20 Data length: 10 byte	Only read
41591	The last thirty-one recharge information	06	36	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



41601	The last thirty-two recharge information	06	40	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41611	The last thirty-three recharge information	06	4A	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41621	The last thirty-three recharge information	06	54	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41631	The last thirty-five recharge information	06	5E	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



41641	The last thirty-six recharge information	06	68	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41651	The last thirty-seven recharge information	06	72	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41661	The last thirty-eight recharge information	06	7C	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41671	The last thirty-nine recharge information	06	86	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



				Recharge amount, length: 4byte, data format: Float	
	The last forty			2) The time recharge occurs, length: 6byte, data	
41.001	,	0.0	00	format: BCD,	Only
41681	recharge information	06	90	Year-Month-Date-Hour-Minute-Second	read
	mormation			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	
				Data length: 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
	forty-one			format: BCD,	Only
41691	recharge	06	9A	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
	The last forty-two recharge information		A4	1) Recharge amount, length: 4byte, data format:	
				Float	
				2) The time recharge occurs, length: 6byte, data	
				format: BCD,	Only
41701		06		Year-Month-Date-Hour-Minute-Second	read
				For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	
				1) Recharge amount, length: 4byte, data format:	
				Float	
	The last			2) The time recharge occurs, length: 6byte, data	
	forty-three			format: BCD,	Only
41711	recharge	06	AE	Year-Month-Date-Hour-Minute-Second	read
	information			For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42	. 500
				C8 00 00 Stands for recharge amount (100), 18 07 16	
				Stands for 2018.7.16,13 12 20 Stands for 13:12:20	
				Data length : 10 byte	



	1			T	
41721	The last forty-four recharge information	06	В8	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41731	The last forty-five recharge information	06	C2	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41741	The last forty-six recharge information	06	СС	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41751	The last forty-seven recharge information	06	D6	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read



41761	The last forty-eight recharge information	06	EO	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41771	The last forty-nine recharge information	06	EA	1) Recharge amount, length: 4byte, data format: Float 2) The time recharge occurs, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): 42 C8 00 00 18 07 16 13 12 20,42 C8 00 00 Stands for recharge amount (100), 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 10 byte	Only read
41793	Current relay control record	07	00	1) Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41801	The last one relay control record	07	08	1) Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



41809	The last two relay control record	07	10	 Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second 	Only read
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	
41817	The last three relay control record	07	18	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41825	The last four relay control record	07	20	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



	The last five			 1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data 	
71833	relay control	07	28	format: BCD,	Only
	record			Year-Month-Date-Hour-Minute-Second	read
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00	
				Stands for relay off, 18 07 16 Stands for 2018.7.16,13	
				12 20 Stands for 13:12:20	
				Data length : 8 byte	
				1) Relay action record, length: 2byte, data format:	
				Hex;	
				FF 00 Stands for relay off; 00 00 Stands for relay	
				open;	
	The last six			2) The time of relay operation, length: 6byte, data	Only
41841	relay control	07	30	format: BCD,	read
	record			Year-Month-Date-Hour-Minute-Second	
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00	
				Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	
				12 20 Stands for 13:12:20	
				Data length : 8 byte	
				1) Relay action record, length: 2byte, data format:	
				Hex;	
				FF 00 Stands for relay off; 00 00 Stands for relay	
				open;	
440.00	The last seven		2.2	2) The time of relay operation, length: 6byte, data	Only
41849	relay control	07	38	format: BCD,	read
	record			Year-Month-Date-Hour-Minute-Second	
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00	
				Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	
				12 20 Stands for 13:12:20	
				Data length: 8 byte	



41857	The last eight relay control	07	40	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD,	Only read
	record			Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	
41865	The last nine relay control record	07	48	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41873	The last ten relay control record	07	50	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



41881	The last eleven relay control record	07	58	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	Only read
41889	The last twelve relay control record	07	60	Data length: 8 byte 1) Relay action record, length: 2 byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6 byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	Only
41897	The last thirteen relay control record	07	68	Data length: 8 byte 1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only



41905	The last fourteen relay control record	07	70	 Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second 	Only read
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	
41913	The last fifteen relay control record	07	78	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41921	The last sixteen relay control record	07	80	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



The last seventeen relay	07	88	1) Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD.	Only
control record		- 	Year-Month-Date-Hour-Minute-Second	read
			For example (Hex): FF 00 18 07 16 13 12 20, FF 00	
			Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	
			12 20 Stands for 13:12:20	
			Data length : 8 byte	
			1) Relay action record, length: 2byte, data format:	
			Hex;	
			FF 00 Stands for relay off; 00 00 Stands for relay	
			open;	
			2) The time of relay operation, length: 6byte, data	Only
	07	90	format: BCD,	read
control record			Year-Month-Date-Hour-Minute-Second	
			For example (Hex): FF 00 18 07 16 13 12 20, FF 00	
			Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	
The last				
	07	98		Only
				read
record				
			·	
			12 20 Stands for 13:12:20	
			Data length : 8 byte	
	The last eighteen relay control record The last eighteen relay control record The last nineteen relay control	The last eighteen relay control record The last nineteen relay control The last	seventeen relay control record The last eighteen relay control record The last nineteen relay control The last nineteen relay control	The last seventeen relay of the time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off; 18 07 16 13 12 20, FF 00 Stands for relay off; 18 07 16 13 12 20, FF 00 Stands for relay off; 18 07 16 13 12 20, FF 00 Data length: 8 byte 1) Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open: 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off; 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off; 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off; 20 00 OS Stands for relay open; 2) The time of relay operation, length: 6byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20



41953	The last twenty relay control record	07	A0	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	Only read
				12 20 Stands for 13:12:20	
41961	The last twenty-one relay control record	07	A8	Data length: 8 byte 1) Relay action record, length: 2 byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6 byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41969	The last twenty-two relay control record	07	во	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



41977	The last twenty-three relay control record	07	В8	1) Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	Only read
41985	The last twenty-four relay control record	07	СО	Data length: 8 byte 1) Relay action record, length: 2 byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6 byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
41993	The last twenty-five relay control record	07	C8	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



42001	The last twenty-six relay control record	07	D0	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	Only read
				12 20 Stands for13:12:20 Data length: 8 byte	
42009	The last twenty-seven relay control record	07	D8	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42017	The last twenty-eight relay control record	07	EO	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



2	42025	The last twenty-nine relay control record	07	E8	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	Only read
					12 20 Stands for 13:12:20 Data length: 8 byte	
2	42033	The last thirty relay control record	07	FO	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open: 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
2	42041	The last thirty-one relay control record	07	F8	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



42049	The last thirty-two relay control record	08	00	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	Only read
				12 20 Stands for 13:12:20 Data length: 8 byte	
42057	The last thirty-three relay control record	08	08	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42065	The last thirty-four relay control record	08	10	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open: 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



	1				
42073	The last thirty-five relay control record	08	18	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20	Only read
				Data length : 8 byte	
42081	The last thirty-six relay control record	08	20	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42089	The last thirty-seven relay control record	08	28	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



42097	The last thirty-eight relay control record	thirty-eight 08 relay control		 Relay action record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 	Only read
				Stands for relay off, 18 07 16Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	
42105	The last thirty-nine relay control record	08	38	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only
42113	The last forty relay control record	08	40	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



42121	The last forty-one relay control record	08	48	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13	Only read
				12 20 Stands for 13:12:20	
				Data length: 8 byte	
42129	The last forty-two relay control record	08	50	1) Relayaction record, length: 2byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42137	The last forty-three relay control record	08	58	1) Relay action record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



4214	The last forty-four relay control record	08	60	1) Relay action record, length: 2 byte, data format: Hex; FF 00 Stands for relay off; 00 00 Stands for relay open: 2) The time of relay operation, length: 6 byte, data format: BCD, Year-Month-Date-Hour-Minute-Second	Only read
				For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	
4215	The last 3 forty-five relay control record	08	68	1) Relayaction record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
4216	The last forty-six relay control record	08	70	1) Relayaction record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read



42169	The last forty-seven relay control record	08	78	1) Relayaction record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00 Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42177	The last forty-eight relay control record	08	80	1) Relayaction record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16 Stands for 2018.7.16, 13 12 20 Stands for 13:12:20 Data length: 8 byte	Only read
42185	The last forty-nine relay control record	08	88	1) Relayaction record, length: 2byte, data format: Hex; FF 00Stands for relay off; 00 00Stands for relay open; 2) The time of relay operation, length: 6byte, data format: BCD, Year-Month-Date-Hour-Minute-Second For example (Hex): FF 00 18 07 16 13 12 20, FF 00 Stands for relay off, 18 07 16Stands for2018.7.16, 13 12 20Stands for13:12:20 Data length: 8 byte	Only read
464511	Meter fault code	FB	FE	00 00 Stands for no trouble 00 01 Stands for relay cannot open Data length: 2 byte Data type: Hex	Only read
464513	Serial number	FC	00	Meter serial number Data length: 4 byte Data type: unsigned int32	Only read
464517	Electric unit price	FC	04	Read the electric unit price of the prepaid meter; Data length: 4 byte Data type: Float	Only read



464535	Meter alarm amount	FC	16	Read the threshold value of the meter two - level alarm , unit RMB Alarm value 1, Alarm value 2 For example: 41 20 00 00 40 A0 00 00,41 20 00 00 Stands for Alarm threshold1 (RMB 10), 40 A0 00 00 Stands for Alarm threshold2 (RMB 5) Data length: 8 byte Data type: Float	Only read
464539	Meter emergency amount	FC	1A	Read the emergency amount of the meter, unit:RMB Data length: 4 byte Data type: Float	Only read

4.3 For example

1. Read input register

For example: Read "total active power"

Send: 01 04 01 56 00 02 90 27

, 01 = The modbus address of meter

04 = Function code

01 = High byte of register start address

56 = Low byte of register start address

00 = High bytes of register number

02 = Low bytes of register number

90 = CRC Low byte of the parity code

27 = CRC High byte of the parity code

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

, 01 = The modbus address of meter

04 = Function code

04 = The number of return data bytes

43 = Data, (high byte of high word)

66 = Data, (low bytes of high word)

33 = Data, (high bytes of low word)

34 = Data, (low byte of lowword)

1B = CRC Low byte of the parity code

38 = CRC High byte of the paritycode

Note: 43 66 33 34(Hex) = 230.2 (Floatingpoint)

2. Read hold register

For example: Read "pulse 1 outputwidth"

Send: 01 03 00 0C 00 02 04 08

01 = The modbus address of meter

03 = Function code

00 = High byte of register start address



OC = Low byte of register start address

00 = High bytes of register number

02 = Low bytes of register number

04 = CRC Low byte of the parity code

08 = CRC High byte of the parity code

Back: 01 03 04 42 C8 00 00 6F B5

01 = The modbus address of meter

03 = Function code

04= The number of return data bytes

42 = Data, (high byte of high word)

C8 = Data, (low bytes of high word)

00 = Data, (high bytes of low word)

00 = Data, (low byte of low word)

6F = CRC Low byte of the parity code

B5 = CRC High byte of the parity code

Note: 42 C8 00 00 (Hex) = 100 (Floating point)

3. Write hold register

For example: Set "pulse constant of pulse 1"= 100 imp/kWh

Send: 01 10 00 16 00 02 04 3F 80 00 00 7F 75

, 01 = The modbus address of meter

10 = Function code

00 = High byte of register start address

16 = Low byte of register start address

00 = High bytes of register number

02 = Low bytes of register number

04 = The number of bytes written to data

3F = Data, (high byte of high word)

80 = Data, (low bytes of high word)

00 = Data, (high bytes of low word)

00 = Data, (low byte of low word)

7F = CRC Low byte of the parity code

75 = CRC High byte of the parity code

Note: 3F 60 00 00 (Hex) = 1 (Floating point), According to the register definition, 1Stands for 100 imp/kWh

Back: 01 10 00 16 00 02 A0 0C

Where, 01 = The modbus address of meter

10 = Function code

00 = High byte of register start address

16 = Low byte of register start address

00 = High bytes of register number

02 = Low bytes of register number

A0 = CRC Low byte of the parity code

OC = CRC High byte of the parity code



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

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