compere®

KPM33B
Three Phase Rail Smart Energy Meter
Manual V2.1

⚠ Danger and Warning

The device may only be installed by professionals. Caused any malfunction due to not follow the instructions in this manual, Manufacturers will not bear any responsibility.

⚠ Electric shock,burning and explosion

- Devices must be installed and maintained by qualified technicians.
- Before any operation on the device, should be isolated from the voltage input and power supply, and the secondary windings of all current transformers are Short circuit.
- Before operation, you must use testing devices to verify that the voltage has been cut off..
- All mechanical parts and covers should be restored in place before the device is energized
- Please providing correct voltage during use.
- Ignore these precautions may cause serious injury.

Do not pay attention to these precautions may cause serious injury.

1 Outline

1.1 Function introduction

KPM33B three-phase rail smart energy meter is designed with the most advanced microprocessor and digital signal processing technology. A comprehensive three-phase electrical parameter measurement, display, energy accumulation, and network communication are integrated. Strong anti-interference ability, and can work stably even in serious electromagnetic interference.

1.2 Application

- Measuring and monitoring power parameters in distribution systems.
- Energy and Energy Efficiency Management System.
- Internal power consumption statistics analysis and charging statistics basis.
- Electric energy metering automatic meter reading system.
- Intelligent Distribution Management System.

1.3 Function features

- It can measure three-phase voltage, current, active power, reactive power, apparent power, power factor, frequency, active power, reactive power.
- Multi-rate electricity metering, up to 8 time period a day, 4 rates can be selected.
- 12-month history statistics function.
- Standard configuration 1 -way RS485 communication interface, Modbus protocol.
- Rated current available:10(100)A.
- LED indicator pulse.
- 1-way passive optocoupler collector active pulse output.
- Front-end integrated DSP measurement chip, data will be saved permanently after power failure.
- Double-row display of power and electrical parameters at the same time.
- Built-in magnetic latching relay, can realize prepayment function.
- 35mm standard rail installation, beautiful appearance, easy installation.
- Multi rate electric energy statistics: 4 kinds of rates, 2 sets of time zone tables, 2 sets of time interval tables.

2 Technical Parameters

2.1 Environmental conditions

Operating temperature: -25℃～+70℃
Storage temperature: -30℃～+75℃
Relative humidity: 5%～95% No condensation
Altitude :3000 meters below

2.2 Rated parameters

Input voltage: AC 3*220/380V
Input current: 10(100)A
Power consumption: <2VA
Overload capacity:
AC voltage loop 1.2 times the rated voltage Continuous operation
2 times the rated voltage , Allow 10S
AC current loop 1.2 times the rated voltage, Continuous operation
20 times the rated voltage ,Allowed 1S

2.3 Precision index

Parameter	Accuracy	Parameter	Accuracy
Voltage	0.2%	Power factor	0.5%
Current	0.2%	Active energy	0.5S
Active power	0.5%	Reactive energy	class2%
Reactive power	2.0%	Frequency	±0.02

2.4 Electrical insulation performance

Power frequency withstand voltage: comply with GB /T13729-2002 provisions, Power frequency voltage 2KV, 1 minute.
Insulation resistance: Comply with GB / T13729-2002 provisions, Insulation resistance of not less than 50MΩ
Impulse voltage: comply with GB / T13729-2002 provisions, Bear the impact of 1.2 / 50US peak for 5KV standard lightning.

2.5 Mechanical properties

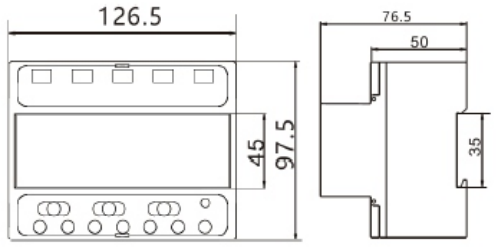
Vibration response:
IEC255-21-1:1998, level 1
Vibration durability:
IEC255-21-1:1998, level 1
Impact response:
IEC 255-21-2, level 1
Impact durability:
IEC 255-21-2, level 1
Collision:
IEC 255-21-2, level 1

2.6 EMC performance

Electrostatic discharge immunity:
IEC61000-4-2,level 4
Fast pulse group immunity:
IEC61000-4-4, level 4
Surge immunity:
IEC61000-4-5, level 4
Power frequency magnetic field immunity:
IEC61000-4-8, level 4

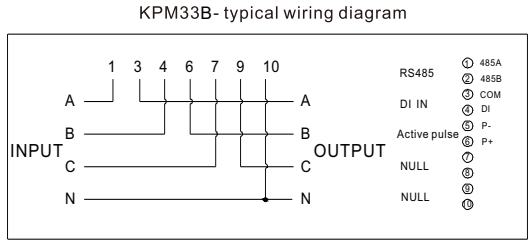
3 Installation and Wiring

3.1 Product size



3.2 Installation and wiring

KPM33B- typical wiring diagram



4 Function Description

4.1 Energy Measurement

KPM33B records historical total active energy; total reactive energy; import/export active/reactive energy; active energy and reactive energy freeze on historical 12 settlement days (0:00 on the 1st of each month),
KPM33B also provides multi-rate electric energy, provides four rates for sharp, peak, flat and valley; and can set up to 8 time periods in 24 hours a day. It can record the total active/reactive energy for sharp, peaks, flats and valley, record four rates for 12 months active/ reactive, and four-rate historical energy.
Example: The daily electricity metering is calculated in 5 time periods. The details are as follows:

Period	Start time point	Tariff
1#Period	6	1
2#Period	10	2
3#Period	12	1
4#Period	15	3
5#Period	23	4

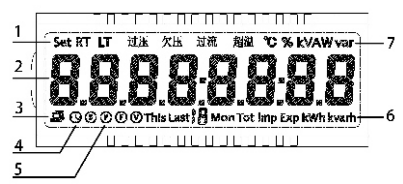
Description
1# Period: from 6 to 10, the tariff is 1;
2# Period: from 10 o'clock to 12 o'clock, the tariff is 2;
3# Period: from 12 o'clock to 15 o'clock, the tariff is 1;
4# Period: From 15:00 to 23:00, the tariff is 3;
5# Period: From 24 o'clock to 6 o'clock the next day, the tariff is 4.
Remark: The electricity kWh of the same tariff will be calculated together.

4.2 Pulse

Pulse output:KPM33B also provides active/reactive energy metering, 1 active energy pulse output function, using optocoupler open collect or output. The method of energy accuracy inspection refers to the national measurement regulations:
Measurement procedures: Pulse error comparison methods for standard meters.
Electrical characteristics: Open collector voltage VCC ≤ 48V, current Iz ≤ 50mA
Pulse constant: 3200imp/kWh

5 Operation Instructions

5.1 Interface display



N0.	Content displayed	Detailed description
1	Settings	Display when setting parameters
2	Display indication	Digital tube display UA (Phase A voltage), Ub (Phase B voltage), Uc (Phase C voltage), IA (Phase A current), Ib (Phase B current), Ic (Phase C current), P (total active power), q (total reactive power), S (total apparent power), PF (average power factor), F (frequency), bd (baud rate), Ad (address), active energy, reactive energy, relay status
3	Communication indication	Two small computers at the bottom left of the screen during communication
4	Time indication	When the enter key is pressed, the time and electrical parameters are switched and displayed
5	Sharp, peak, flat, valley display	Multi-rate power display
6	Power display	Display active power and reactive power
7	Electric parameter unit symbol	Voltage V, kV; Current: A, kA; Active power: W, kW; Reactive power var, kvar; apparent power:VA, kVA

5.2 Operation and display

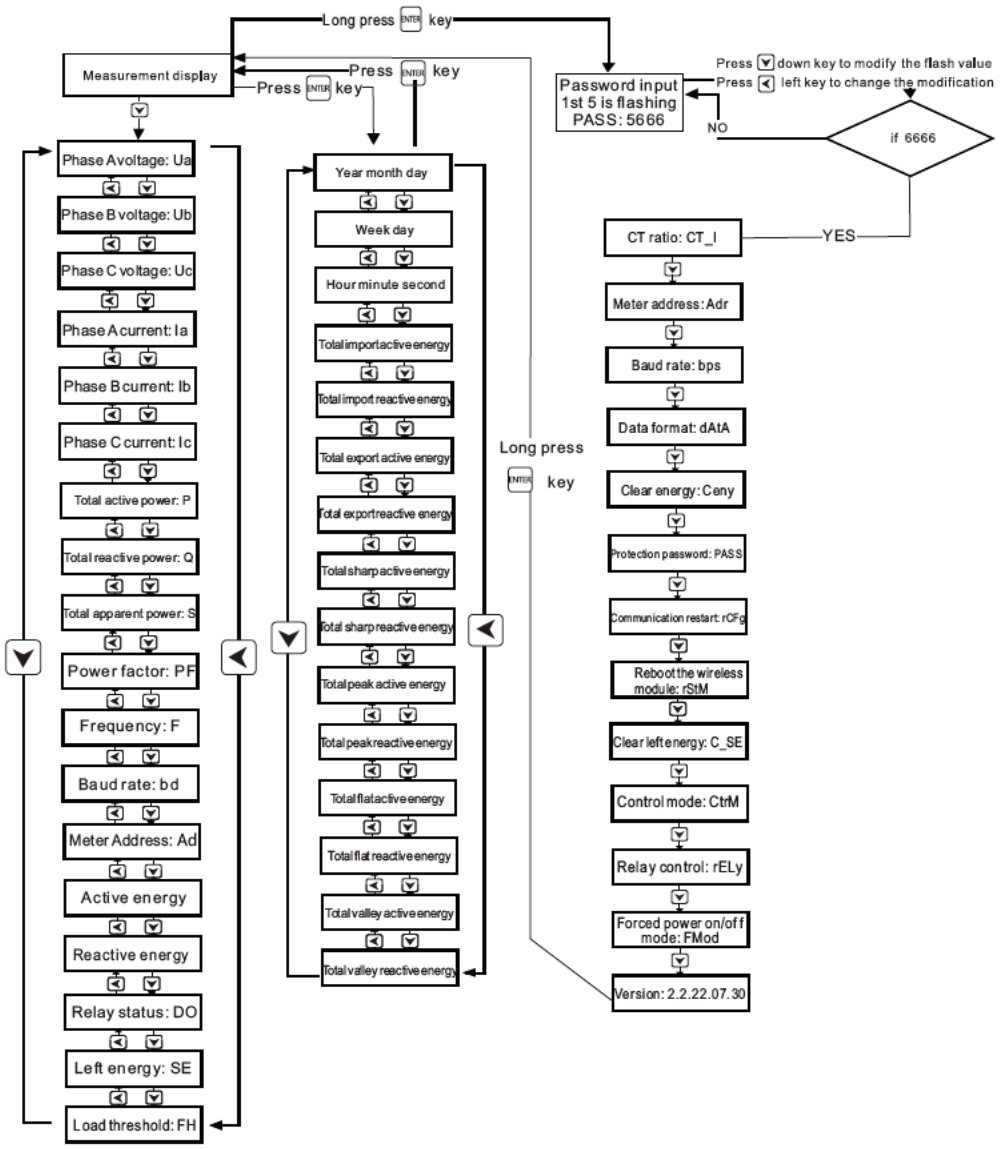
Measurement and setting display flow chart

Three touch buttons on the front panel, they are labeled from left to right as ◀ key, ▼ key, ENTER key. The display of different measurement data and the setting of parameters can be realized through the operation of three buttons.

Name of key	Functional description
◀ Down key	Down key to switch the interface of basic parameters and switch the modification bit; press the key to change the value of the modification bit, and long press the key to return to the parameter display interface.
▼ Left key	Used to cycle through all the parameters of the function item in the parameter setting state. Used to increase the value of the modified bit in the parameter setting state
ENTER Enter key	In the parameter setting state, it is used to enter the modification menu and confirm the programming parameters; Long press to enter the setting interface

5.3 parameter setting menu is as follows

Before starting measurement, please set
If you want to enter the setting interface, you need to press ENTER and hold for 3 seconds to enter the password input interface. The default password is 6666.Enter the password. Press ENTER key to enter the parameter setting interface, then press ▼ key to select theitem to be set After pressing the ENTER key, the leftmost digit of the set value begins to flash. Press ◀ to select the digit to be modified. Press ▼ to increase the size of the modified digit value. After each modification, press ENTER to confirm. In the setting interface, if there is no key in 30s, it will return to the measurement display.



5.3 Parameter settings

Before starting the measurement, please make the settings.
When entering the setting screen, you need to press and hold ENTER for 3s to enter the password input interface, the default password: 6666. Press the ENTER key to enter the parameter setting interface, then press the ▼ key to select the parameters to be set. After pressing the ENTER key, the leftmost digit of the set value starts to flash. Press the ◀ key to select the digit to be modified, and press the ▼ key to increase the value of the modified digit. After all modifications are completed, press the ENTER key to confirm. In the setting interface, if no key is pressed for 30s, it will return to measurement display screen.

1. Current ratio setting
When the current is connected to the instrument by indirect access method and the current is connected through the transformer, set this item to the actual transformer ratio, and set the current ratio to 1 in the rest of cases.
Note: Setting range: 0001~9999; Default value: 0001

CT_I:0001
◀ Select the bit to modify
▼ Change in value
ENTER Confirmation key. After modification, press ENTER key. The bit won't flash and the modification is completed.

2. Modbus RTU address setting
The meter address is for standard Modbus RTU communication. On the same Rs485 line, the meter address can't be the same.
Note: Setting range 001-247. The default address is 001.

Adr:001
◀ Select the bit to modify
▼ Change in value
ENTER Confirmation key. After modification, press ENTER key. The bit won't flash and the modification is completed.

3. Baud rate setting
The baud rate of Rs485 port can be set according to your system. But the parity of each device should be the same.
Note: Optional 1200bps, 2400bps, 4800bps, 9600bps, 19200bps. Default: 9600bps

BPS: 9600
▼ Change the option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

4. Data format
Rs485 data format can be set based on your system.
Note: 81O (Odd parity), 81E(Even parity), 81N (No parity)

dAtA: 81E
▼ Change the option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

5. Clear energy data
Clear current, historical and multi-rate active and reactive energy.
The default is No. You can switch to YES to clear.

CEny:no
▼ Change the option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

6. Change Password
Initial password: 6666, users can set by themselves.
Note: When setting the password, please save the password in advance and set it carefully.

PASS:6666
◀ Select the bit to modify
▼ Change in value
ENTER Confirmation key. After modification, press ENTER key. The bit won't flash and the modification is completed.

7. Reset wireless communication
Reset the configuration of wireless communication. Users can reset the network and server information.
Default no, you can switch yes to reconfigure.

rCFg:no
▼ Change option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

8. Restart the communication module
After reconfigured the wireless communication, users need to restart the communication module.
Note: no means no need to restart, yES means restart.

rStM:no
▼ Change option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

9. Clear paid energy
Used to clear the left paid power.
Note: no means no need to clear, yes means clear.

C_SE:no
▼ Change option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

10. Control mode setting
Used to change the control mode of the meter relay.
Note: rMod (remote control), LMod (local control)

CtrM: rMod
▼ Change option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

11. Relay on/of f setting
Used to set the relay open or closed mode (only in local control mode, it will take ef fect from next time), and the status after the last relay action is displayed at the same time.
Note: on (relay close), oFF (relay open)

rELy: on
▼ Change option
ENTER Confirmation key. After modification, press ENTER key to complete the modification

12. Forced power on/of f setting
Displays the current forced power-of f mode of the meter, which cannot be changed locally.
Note: n-P (non-forced mode), f-b (forced mode), f-P (mandatory power on mode)

Fmod: n_P

13. Current version
Displays the current software version

2.2.22.07.30

5.4 Parameter settings

Parameter setting menu structure menu is as follows
Factory default value:

No	Display	Default	Definition
1	CT_I	0001	Current transformer(1~9999)
2	Adr	001	Meter address(1~247)
3	bPS	9600	Baud rate (1200-19200bps)
4	dAtA	81E	Data format, 8 data bit, 1 parity bit, 1 stop bit
5	C Eny	no	Used to clear energy data
6	PASS	6666	Avoid non-staff people to change meter settings
7	rCFg	no	Used to reconfigure wireless communication
8	rStM	no	Used to restart wireless module
9	C_SE	no	Used to clear paid left energy data
10	CTrM	rMod	Used to change relay control mode
11	rELy	on	Used to control relay on/ off
12	F Mod	n_P	Used to display meter forced power on/off mode
13	2.2.22.07.30		Display current firmware version

6 Communication

KPM33B supports MODBUS-RTU communication protocol, one start bit, 8-bit data bits, parity bit, 1 stop bits, each byte length is 11 bits.
Supported baud rates: 1200bps, 2400bps, 4800bps, 9600bps, 19200bps.
Factory default communication parameters: 9600bps, Even parity bit
1 start bit + 8 data bits + 1 parity bit + 1 stop bit
The format of the data frame is as follows:
Address field + command field + data field + CRC check field

Supported function codes			
DEC	HEX	Definition	Operation description
03	0x03	Read register data	Read the value of one or more registers
16	0x10	Write Multiple Registers	Write multiple register data at once

6.1 System parameters read and write

This area stores system parameters related to equipment operation, including communication parameters, current ratio, etc., which can be read by using the Modbus protocol 03H function code，or using the 10H function code setting.

Address	Parameter	Numerical range	Data type
0000H	Protection password	0~9999	Word
0001H	Modbus address	Modbus-RTU address：1~247	Word
0002H	bps (BIT0~7): 0:1200, 1: 2400, 2: 4800, 3:9600, 4: 19200 Data frame (BIT 8~15): 0: 8,1,n 1 : 8,1,O 2: 8,1,e	1~9999	Word
000CH	Clear power	Enter 0x5578 command to clear the power immediately	

6.2 Basic measurement parameters Area

Basic measurement area, mainly measuring basic voltage, current, power, power factor, etc.;
All parameters in this area are real-time measurement parameters and are read using the Modbus protocol 03H function code, It is read-only data. The data format is floating-point data, and the data in this area is a real-time data on the primary side because it has been multiplied by the transformation ratio, This area is the real-time data on the primary side.

Address	Parameter	Data type	Unit
0030H	Phase A voltage	Floating point	V
0032H	Phase B voltage	Floating point	V
0034H	Phase C voltage	Floating point	V
0036H	Phase A current	Floating point	A
0038H	Phase B current	Floating point	A
003AH	Phase C current	Floating point	A
003CH	AB Line voltage	Floating point	V
003EH	BC Line voltage	Floating point	V
0040H	CA Line voltage	Floating point	V
0042H	Phase A active power	Floating point	W
0044H	Phase B active power	Floating point	W
0046H	Phase C active power	Floating point	W
0048H	Three phase active power	Floating point	W
004AH	Phase A reactive power	Floating point	var
004CH	Phase B reactive power	Floating point	var
004EH	Phase C reactive power	Floating point	var
0050H	Three phase reactive power	Floating point	var
0052H	Phase A apparent power	Floating point	VA
0054H	Phase B apparent power	Floating point	VA
0056H	Phase C apparent power	Floating point	VA
0058H	Three phase apparent power	Floating point	VA
005AH	Phase A power factor	Floating point	
005CH	Phase B power factor	Floating point	
005EH	Phase C power factor	Floating point	
0060H	Three phase power meter	Floating point	
0062H	Frequency	Floating point	Hz
0200H	Phase A apparent demand		
0200H	Phase B apparent demand		
0200H	Phase C apparent demand		

6.3 Multi rate area

All data in this area are cumulative amount of energy and they all belong to the primary side, which can be read using the Modbus protocol 03H function code.

Address	Parameter	Data type	Unit
0080H	Total active energy	Floating point	kWh
0082H	Forward active energy	Floating point	kWh
0084H	Reverse active energy	Floating point	kWh
0086H	Total reactive energy	Floating point	kvarh
0088H	Forward total reactive energy	Floating point	kvarh
008AH	Reverse total reactive energy	Floating point	kvarh
008CH	Total sharp active energy	Floating point	kWh
008EH	Total peak active energy	Floating point	kWh
0090H	Total flat active energy	Floating point	kWh
0092H	Total valley active energy	Floating point	kWh
0094H	Total sharp reactive energy	Floating point	kvarh
0096H	Total peak reactive energy	Floating point	kvarh
0098H	Total flat reactive energy	Floating point	kvarh
009AH	Total valley reactive energy	Floating point	kvarh
009CH	Total combined active energy for this month	Floating point	kWh
009EH	Total combined active energy of the previous 1 settlement day	Floating point	kWh
00A0H	Total combined active energy of the previous 2 settlement day	Floating point	kWh
00A2H	Total combined active energy of the previous 3 settlement day	Floating point	kWh
00A4H	Total combined active energy of the previous 4 settlement day	Floating point	kWh
00A6H	Total combined active energy of the previous 5 settlement day	Floating point	kWh
00A8H	Total combined active energy of the previous 6 settlement day	Floating point	kWh
00AAH	Total combined active energy of the previous 7 settlement day	Floating point	kWh
00ACH	Total combined active energy of the previous 8 settlement day	Floating point	kWh
00AEH	Total combined active energy of the previous 9 settlement day	Floating point	kWh
00B0H	Total combined active energy of the previous 10 settlement day	Floating point	kWh
00B2H	Total combined active energy of the previous 11 settlement day	Floating point	kWh
00B4H	Total combined active energy of the previous 12 settlement day	Floating point	kWh
00B6H	Total combined reactive energy for this month	Floating point	kvarh
00B8H	Total combined reactive energy of the previous 1 settlement day	Floating point	kvarh
00BAH	Total combined reactive energy of the previous 2 settlement day	Floating point	kvarh
00BCH	Total combined reactive energy of the previous 3 settlement day	Floating point	kvarh
00BEH	Total combined reactive energy of the previous 4 settlement day	Floating point	kvarh
00C0H	Total combined reactive energy of the previous 5 settlement day	Floating point	kvarh
00C2H	Total combined reactive energy of the previous 6 settlement day	Floating point	kvarh
00C4H	Total combined reactive energy of the previous 7 settlement day	Floating point	kvarh
00C6H	Total combined reactive energy of the previous 8 settlement day	Floating point	kvarh
00C8H	Total combined reactive energy of the previous 9 settlement day	Floating point	kvarh
00CAH	Total combined reactive energy of the previous 10 settlement day	Floating point	kvarh
00CCH	Total combined reactive energy of the previous 11 settlement day	Floating point	kvarh
00CEH	Total combined reactive energy of the previous 12 settlement day	Floating point	kvarh
00D0H	Sharp active energy for this month	Floating point	kWh
00D2H	Sharp active energy of the previous 1 settlement day	Floating point	kWh
00D4H	Sharp active energy of the previous 2 settlement day	Floating point	kWh
00D6H	Sharp active energy of the previous 3 settlement day	Floating point	kWh
00D8H	Sharp active energy of the previous 4 settlement day	Floating point	kWh
00DAH	Sharp active energy of the previous 5 settlement day	Floating point	kWh
00DCH	Sharp active energy of the previous 6 settlement day	Floating point	kWh
00DEH	Sharp active energy of the previous 7 settlement day	Floating point	kWh
00E0H	Sharp active energy of the previous 8 settlement day	Floating point	kWh
00E2H	Sharp active energy of the previous 9 settlement day	Floating point	kWh
00E4H	Sharp active energy of the previous 10 settlement day	Floating point	kWh
00E6H	Sharp active energy of the previous 11 settlement day	Floating point	kWh
00E8H	Sharp active energy of the previous 12 settlement day	Floating point	kWh
00EAH	Sharp reactive energy for this month	Floating point	kvarh
00ECH	Sharp reactive energy of the previous 1 settlement day	Floating point	kvarh
00EEH	Sharp reactive energy of the previous 2 settlement day	Floating point	kvarh
00F0H	Sharp reactive energy of the previous 3 settlement day	Floating point	kvarh
00F2H	Sharp reactive energy of the previous 4 settlement day	Floating point	kvarh
00F4H	Sharp reactive energy of the previous 5 settlement day	Floating point	kvarh
00F6H	Sharp reactive energy of the previous 6 settlement day	Floating point	kvarh
00F8H	Sharp reactive energy of the previous 7 settlement day	Floating point	kvarh
00FAH	Sharp reactive energy of the previous 8 settlement day	Floating point	kvarh
00FCH	Sharp reactive energy of the previous 9 settlement day	Floating point	kvarh
00FEH	Sharp reactive energy of the previous 10 settlement day	Floating point	kvarh
0100H	Sharp reactive energy of the previous 11 settlement day	Floating point	kvarh
0102H	Sharp reactive energy of the previous 12 settlement day	Floating point	kvarh
0104H	Peak active energy for this month	Floating point	kWh
0106H	Peak active energy of the previous 1 settlement day	Floating point	kWh
0108H	Peak active energy of the previous 2 settlement day	Floating point	kWh
010AH	Peak active energy of the previous 3 settlement day	Floating point	kWh
010CH	Peak active energy of the previous 4 settlement day	Floating point	kWh
010EH	Peak active energy of the previous 5 settlement day	Floating point	kWh
0110H	Peak active energy of the previous 6 settlement day	Floating point	kWh
0112H	Peak active energy of the previous 7 settlement day	Floating point	kWh
0114H	Peak active energy of the previous 8 settlement day	Floating point	kWh
0116H	Peak active energy of the previous 9 settlement day	Floating point	kWh
0118H	Peak active energy of the previous 10e settlement day	Floating point	kWh
011AH	Peak active energy of the previous 11 settlement day	Floating point	kWh
011CH	Peak active energy of the previous 12 settlement day	Floating point	kWh
011EH	Peak reactive energy of this month	Floating point	kvarh
0120H	Peak reactive energy of the previous 1 settlement day	Floating point	kvarh
0122H	Peak reactive energy of the previous 2 settlement day	Floating point	kvarh
0124H	Peak reactive energy of the previous 3 settlement day	Floating point	kvarh
0126H	Peak reactive energy of the previous 4 settlement day	Floating point	kvarh
0128H	Peak reactive energy of the previous 5 settlement day	Floating point	kvarh
012AH	Peak reactive energy of the previous 6 settlement day	Floating point	kvarh
012CH	Peak reactive energy of the previous 7 settlement day	Floating point	kvarh
012EH	Peak reactive energy of the previous 8 settlement day	Floating point	kvarh
0130H	Peak reactive energy of the previous 9 settlement day	Floating point	kvarh
0132H	Peak reactive energy of the previous 10 settlement day	Floating point	kvarh
0134H	Peak reactive energy of the previous 11 settlement day	Floating point	kvarh
0136H	Peak reactive energy of the previous 12 settlement day	Floating point	kvarh
0138H	Flat active energy for this month	Floating point	kWh

7 Common malfunction analysis

➢Nothing is displayed after the unit is powered on
- Check that the supply voltage and other wiring are correct and that the supply voltage should be within the operating range
- Turn off the device and the host computer, and then reboot

➢The device is not working properly after power on
- Turn off the device and the host computer, and then reboot

➢Voltage or current readings incorrect
- Check if the wiring mode setting matches the actual wiring mode
- Check whether the voltage transformer (PT), current transformer (CT) ratio is set correctly
- Check that GND is properly grounded
- Check that GND is properly grounded
- Check that the shield is grounded
- Check the voltage transformer (PT), current transformer (CT) is intact

➢The power or power factor reading is incorrect, but the voltage and current readings are correct
- Comparison of the actual input voltage and current wiring and wiring diagram, to check whether the correct phase relationship

➢RS-485 communication is not normal
- Check whether the communication baud rate, ID and communication protocol settings of the host computer are consistent with the meter
- Please check the data bits, stop bits, parity settings and the host computer is consistent
- Check that the RS-232 / RS-485 converter is working properly
- Check whether the problem entire communications network lines (short circuit, open circuit, grounding, shielding in a single properly grounded, etc.)
- Turn off the device and the host computer, and then reboot
- The communication line length is recommended to connect approximately 100 to 200 ohm matching resistors at the end of the communication line

Note: If there are some unsolved problems, please contact our company's after-sales service department

8 Product quality

8.1 Quality assurance

For all new devices sold to users, within a certain number of years from the date of sale to users, free quality assurance will be implemented for failures caused by defects in design, materials and workmanship. If the product is determined to meet the above warranty conditions, the supplier will repair and replace it free of charge.

8.2 Quality assurance limited

Remarks: Damage caused by incorrect installation, use, and storage is not covered by the warranty.

9 Wireless communication

KPM33B supports WiFi wireless communication mode and can be connected to enterprise wireless AP. The uplink adopts mqtt protocol for data communication with the master station. The specific configuration steps are as follows:
Step 1: Set mobile hotspot
Set the WiFi hotspot account to compere-debug and the password to kpm-debug for the meter to connect. Then start the settings on Touch Energy APP.
Step 2: Set the meter to debug mode
Enter the setting interface,find the "rCFG:no" option and set it to "yes" mode.

rCFG:yes

Then the meter will initialize the network configuration.

Note: The system only stays in yes status for a few seconds then it will go back to no. Once u changed to yes status and pressed ENTER key, the reconfigure step is finished.

The server configuration of both modes needs to use Touch Energy APP-meter setting function. The configuration steps are as follows:

Step 3: 'Touch Energy' APP meter setting
1. Download 'Touch Energy' from Google play or Apple store. As Fig 1.
2. Click 'Meter setting' to enter the code search page. As shown in Fig 2.
3. Search for devices: Input the production number to search If the number is wrong, the search button will be grayed and cannot be clicked.If the number is correct, click the "code search" button to identify the device.
4. Input the configuration parameters and submit:
4.1 Private server settingsThis page is for the meters sendingdata to the customers' private server.

Input private server address (support domain name and IP address), server port, MQTT account, MQTT password, etc. If using WIFI meter, the local WIFI name and Password are required. WPA2 for enterprise level WIFI can be set too.If using 4G meter, the WIFI name and Password is not required.
4.2 4G communication setting
Input server address (support domain name and IP address), port, MQTT account, MQTT password and submit.The default information is for sending data to T@ENERGY cloud platform.
4.3 WIFI communication setting
Input server address (support domain name and IP address), port, MQTT account, MQTT password, local WiFi name and password (WPA2 for enterprise level WIFI can be set too)and submit.
The default inform-ation is for sending data to T@ENERGY cloud platform.
5. Wait for about 20 seconds for the meter to return status information.
If the configuration is successful, it will display "Successfully issued, please continue ", click 'exist' to return to the device ID search interface.

Click "next" for bulk quantity meters settings. It will enter the last setting page and retain the data set last time. Users only need to change the meter number and submit.

FAQ for network connection

1. Issuing timeout: data communication timeout.It means the settings are not successfully or setting is succeeded but data return is failed.
Solution: Click 'OK' to stay on the device information page and wait for 30 seconds to see if the device is showing offline. If yes (offline), that means the setting issucceeded. If not (online), pls submit again.

2. Parameter lost: Data lost during communication.
Solution: Click 'OK' to stay on the device information page and wait for 30 seconds to see if the device is showing offline. If yes (offline), that means the setting is succeeded. If not (online), pls submit again.

10 Common Failure Analysis

No display after device is powered on
- Check whether the power supply voltage and other wiring are correct, and the power supply voltage should be within the working range;
- Turn off the device and host computer, and then restart.

The device does not work properly after power-on
- Turn off the device and host computer, and then restart.

Incorrect voltage or current reading
- Check whether the wiring mode setting is consistent with the actual wiring method

The power or power factor is incorrect, but the voltage and current is correct
- Compare the voltage and current input of the actual wiring and the wiring diagram, and check whether the phase relationship is correct

RS-485 communication is abnormal
- Check whether the communication baud rate, ID and communication protocol settings of the host computer are consistent with the device;Please check whether the data bit, stop bit, check bit settings are consistent with the host computer

11 Product Quality Assurance

11.1 Quality Assurance

All new devices sold to users, within a certain number of years from the date of sale to users, are subject to free quality assurance for failures caused by defects in design, materials and workmanship. If the product is determined to meet the above warranty conditions, the supplier will repair and replace it free of charge.
The supplier may require the user to send the device back to the manufacturer to confirm whether the device is covered by the free warranty and repair the device.

11 .2 Warranty Restrictions

The following devices are not covered by the free warranty:
- Damage caused by incorrect installation, use, and storage.
- Abnormal operation and application conditions beyond the product specifications.
- Devices repaired by organizations or persons not authorized by the company.
- Devices that have exceeded the free warranty period.

12 Contact Details

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