INSTRUCTIONS

SINGLE-PHASE PREPAID ELECTRONIC ACTIVE ENERGY METER WITH IC CARD

I. Technical specification

Rated Voltage:	230V
Rated Current:	10(60)A
Impulse Constant:	1000imp/kWh
Rated Frequency:	50-60Hz
Accuracy:	1.0
Display:	LCD 6+2
Working Temperature:	-20—55℃
Storage Temperature:	-25—70℃
Power Consumption:	≤1.2W and 1.2VA
Average Humidity:	≤75%
Start Current:	0.4 %Ib

II. Function and application

1. This is a prepaid meter, which could work when you charge the meter through IC card.
2. When the remain energy is 0,and the relay will open to remind the user to charge the IC card. After that, the relay will close. There are 3 methods to close the relay. 1.insert the IC card 2.press the button 3.switch on after 1 minute automatically. The methods could be chosen to switch on via Infrared and RS485.
3. When the instantaneous power value is more than the threshold, the relay will open. The methods of making the relay close are settable. 1. inject the IC card; 2.press the button and the times of using this method should be less than the times of switching off caused by over loaded; 3. switch on after 1 minute automatically.
4. When the remain energy is less than the threshold, the meter will alarm and the threshold could be set via Infrared or RS485.
5. It could prevent the coemption of kWh. When the purchased kWh or the purchased kWh pulse the remain kWh is more than 999999.99kwh,the kWh injection will fail. The max coemption value could be modified through communication,and the default value is 999999.99Kwh.
6. When off power, the meter will record the total kWh, remain kWh, impulse number and also other data that the meter has.
7. LCD displays total kWh, remain kWh, Latest purchasing energy, meter number, user number and the forward and reverse

(1) Total energy (see Fig.1)

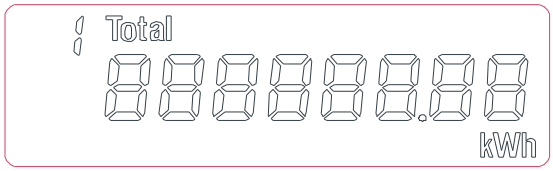


Fig.1

(2) Remain energy (see Fig.2)

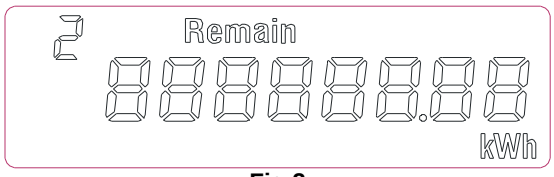


Fig.2

(3) Latest purchasing energy (see Fig.3)

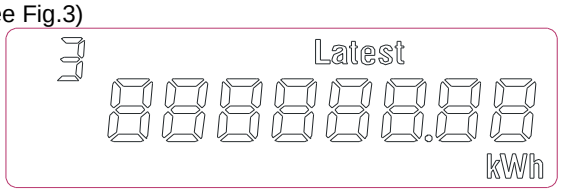


Fig.3

(4) Meter number (see Fig.4)

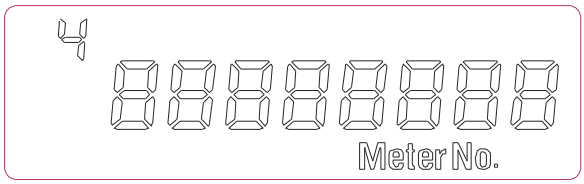


Fig.4

(5) User number (see Fig.5)

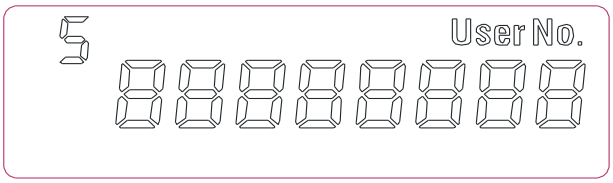


Fig.5

(6) The purchased energy exceed the hoarding threshold (see Fig.6)

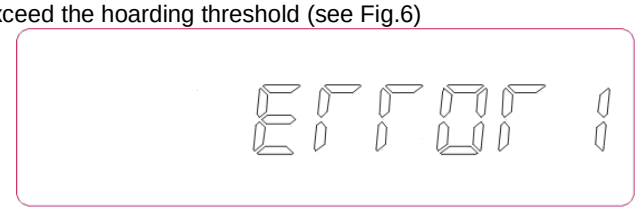


Fig.6

(7) Encryption card failure (see Fig.7)

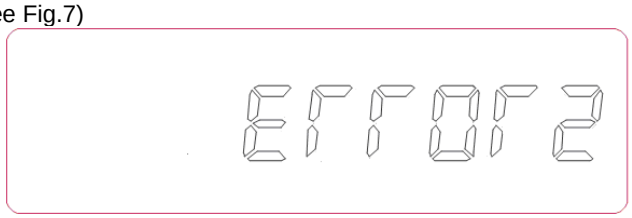


Fig.7

(8) Illegal users (see Fig.8)

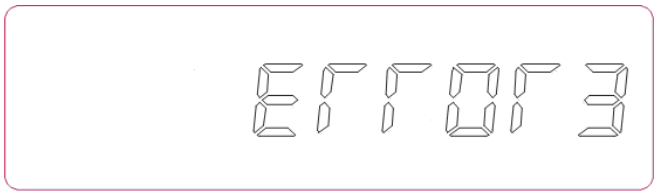


Fig.8

(9) Fail to purchase energy (see Fig.9)

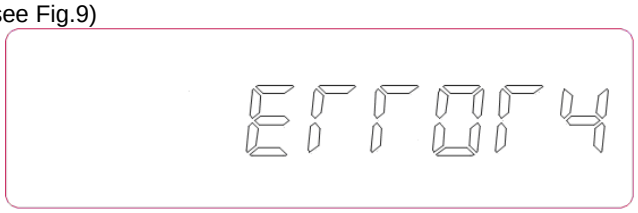


Fig.9

(10)Alarm when the remain energy is not enough (see Fig.10)

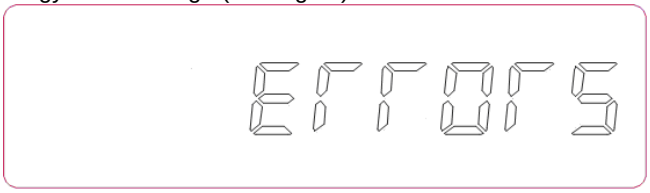


Fig.10

(11) Put the kWh into the meter successfully (see Fig.11)

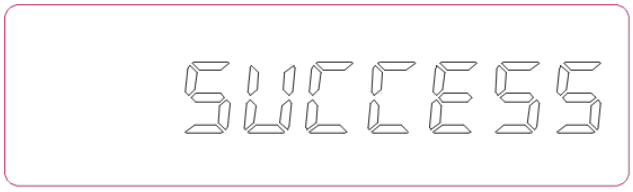


Fig.11

(12)Insert the clear card (see Fig.12)

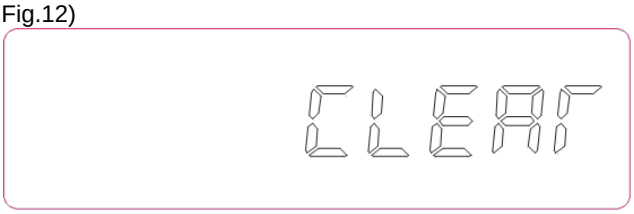
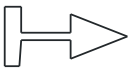
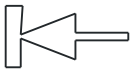


Fig.12

(13)Current running in forward



(14) Current running in reverse



(15) Communicate with meter by PC or infrared equipment.

(16) No kWh, and the relay was tripped（the data on LCD will flash in 1 second）

(17) Insert the card, meter confirm the data is correct.

(18) Insert the card, meter confirm the data is wrong.

8. Press the button to scroll LCD pages:
   1) Total kWh
   2) Remain kWh
   3) Latest purchasing energy
   4) Meter number
   5) User number
   6) The LCD will show Error5 when the remain energy is not enough(it will not alarm if the remain energy is more than the alarm value).
9. Communication: Infrared and RS485.

III. Outer dimension (see Fig.13)

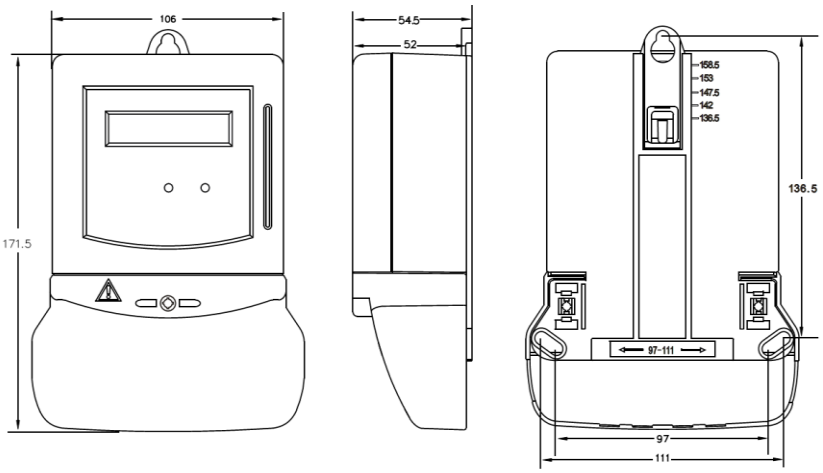


Fig.13

IV. Wiring Diagram (see Fig.14)

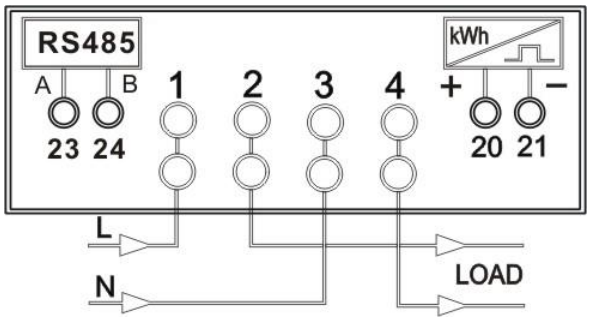


Fig.14

V. Standard

1. IEC62052-11 Electricity metering equipment (a.c.)—General requirements, tests and test conditions.
2. IEC62053-21 Alternating current static watt-hour meters for active energy(classes 1and 2).
3. IEC62053-31 Electricity metering equipment (a.c.) - Particular requirements -Pulse output devices for electromechanical and electronic meters (two wires only).
4. IEC62056-21 Electricity metering –. Data exchange for meter reading, tariff and load control – Direct local data exchange.
5. Protection class：IP51.

VI. Special remark

In order to make sure the relay works well, please insert the IC card after 10 seconds when power on. After insert the IC card, please wait until there is SUCCESS or other ERROR code. If you did not follow this instruction, you should bear the consequence by yourself.