

# GREEN STATIC SINGLE-PHASE MODULAR WATT-HOUR METER INSTRUCTION



## Use and spectrum

GREEN electronic single-phase modular watt-meter is a new generation product with good capability which is advanced on the basis of single phase electric meter. It enjoys high accuracy of measure, novelty appearance, and convenient installation. It's the ideal product to realize the reasonable installation under the condition of meter innovation.

All the capabilities are correspond with the technical requirements of the standard IEC61036 *Static AC Active Watt-hour Meter*.

## Function and characteristic

- 1: Active electricity measuring, without adjust under long-time work.
- 2: Prevent reverse tamper and indication.
- 3: Wide work temperature range: -30—55°C

## Technical specification

1. Rated voltage: 230V
2. Rated current: 5(60)A
3. Rated frequency: 50/60Hz
4. Class of Accuracy: 1.0
5. Start current: 0.4%I<sub>b</sub> (class 1.0)
6. Creep: logical design of Anti-creep
7. Power consumption: ≤1W (when 230V 20A)
8. Accuracy (see the form below)

Load current	Power factor COSΦ	Basic error%		
		Class 0.5	Class 1	Class 2
0.05I <sub>b</sub>	1.0	±1.0	±1.5	±2.5
0.1I <sub>b</sub> ~I <sub>max</sub>	1.0	±0.5	±1.0	±2.0
0.1I <sub>b</sub>	0.5(L)	±1.0	±1.5	±2.5
	0.8(C)	±1.0	±1.5	—
0.2I <sub>b</sub> ~I <sub>max</sub>	0.5(L)	±0.5	±1.0	±2.0
	0.8(C)	±0.5	±1.0	—

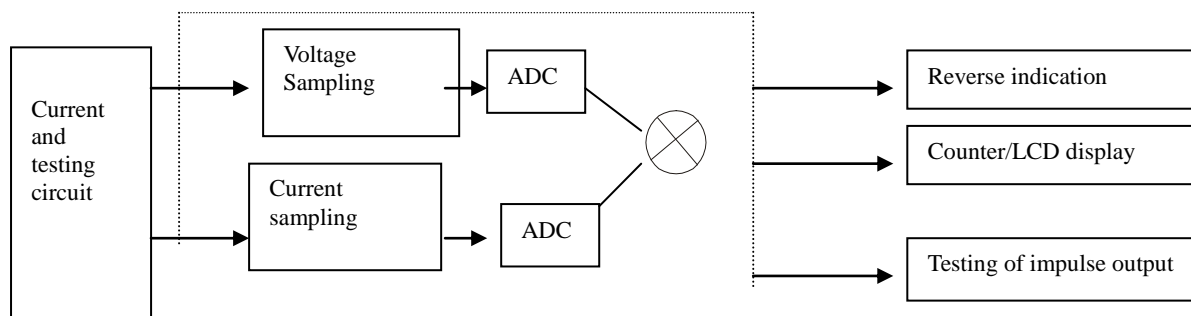
9. Invironment condition: standard work temperature -20—45°C  
limit work temperature -30—55°C  
relative humidity ≤85%

10. Weight: 0.28kg

11. Out size: 115X78X65mm

## Work principium

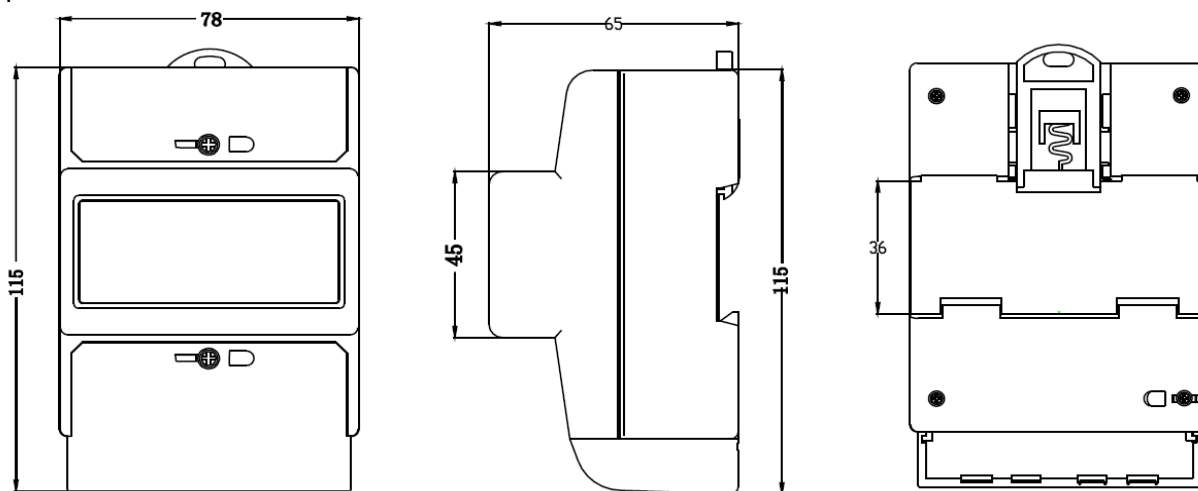
See the picture 1. send simulate signal of sampling current and sampling voltage separately to special integrated circuit, after inner amortize and magnify to multiplicative part. And voltage signal multiply with current signal, through A/D transition to transfer simulate value to figure signal. Then, through frequency divide circuit and drive circuit to use the impulse output of electricity signal in drive impulse circuit and electricity indication.



Picture 1 principium chart

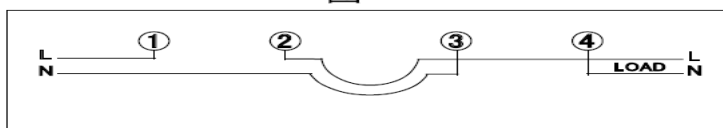
## Installation

1. The meter is checked out and sealed before leave the factory, then installing and using.
2. The meter should be installed in the meter box no matter indoor or outdoor. The meter should be installed on the firm and against-fire wall. There should no any corrupt gas in the air.
3. The meter should be connected in according to the wiring diagram on the terminal block crust. It's better to meet with copper line or copper connection head.
4. The energy counter display meter show the electricity quantity with the unit of kWh.
5. Installation picture 2 (meter installation chart).
6. Wiring diagram—Picture3 (energy meter wiring diagram)
- 7.



Picture 2

图一



图二



Picture 3

## Transportation and deposited

1. The meter can't be over-shocked in the process of transportation and deposited. It should be according to transportation and deposited rule of GB/T15464-1995 *Currency Packing Condition of Instruments*.
2. Keep the meter in the original package when deposited. The deposited temperature range should be 0—40°C. relative humidity  $\leq 85\%$ .  
There is no corrupt gas in the air.
3. The meter is deposited on the platform in storage. The fold layer should not more than 10 cartons. After open the carton, the unit meter fold layer should not more than 15 pieces.

## Time limit of Guarantee

Within 18 months from the day of sale, and on the condition that the user abide by the specification and the sealing is kept completely, if the meter is not correspond with the rule of enterprise standard, the meter can be repaired free or replaced.