USER MANUAL

EPM6600(-T)LED tester



Packaging list

1.EPM6600(-T) LED tester	1ps
2.Fasten bracket	2 ps
3. Bracket screw	4 ps
4. Spare fuse	1 ps
5.User manual	1 copy
6. Warranty card	1 copy
7. Product certification	1 copy
8. Temperature sensor	1 (Only EPM6600-T)

Description

EPM6600(-T) LED tester is used big screen display with multicolour Nixie tube, touch button，with large black optic. It make the meter look more intuitive, the operation be easy and convenient. It puts together power, power factor, voltage, current, annual electricity consumption , energy , temperature and so on. So it looks high-end.

The feature

- Digital operation
- Big screen display with multicolour Nixie tube, the information is more rich
- Touch button with sound.
- The Units are displayed by green Nixie tube, which looks audio-visual.
- Annual electricity consumption’s hours used in one day can be set ,the blue Nixie tube display the hours in one day.
- Power Resolution is automatic switchover, when <100W it display two decimal places,>100W it display one decimal place.
- Energy unit can be intelligent switch,<0.1KWh it display Wh, and two decimal

places,>0.1KWh it display KWh, the decimal point places can change according to the measure result, the maximum of the decimal point places is four .

- Power factor or carbon emissions are alternative.
- Annual carbon emissions or real-time carbon emissions are alternative.
- Carbon emission factor can be set.
- Degrees Celsius and Fahrenheit are alternative(EPM6600-T).
- Total electricity time displayed in blue digital tube.
- Press the Reset button, the total electricity time and energy will be reset.
- Over range Indication “HHHH”
- The temperature sensor is isolated, which will not cause electric shock (EPM6600-T)
- This machine is thin, the thickness is only 36.5mm(not contain the holder)

The meter’s functions

Meter Type	EPM6600	EPM6600-T
Power measure	●	●
Voltage measure	●	●
Current measure	●	●
Power factor measure	●	●
Carbon emissions one year	●	●
Annual Electricity Consumption	●	●
Energy measure	●	●
Frequency measure	●	
Temperature measure		●
The hours display in one day of Annual Electricity Consumption	●	●
Total electricity time	●	●

Note:● means the meter has this function, the energy and total electricity time will reset after the power down.

Technical index

Electrical parameter index

Parameter	Measure range	EPM6600		EPM6600-T	
		resolution ratio	Measure accuracy	resolution ratio	Measure accuracy
Power	0~2000W	0.01W[1]	±(0.5FS+0.01) [1]	0.01W[1]	±(0.5FS+0.1) [1]
Voltage	0~275.0V	0.1V	±(0.5FS+0.1)	0.1V	±(0.5FS+0.1)
Current	0~9.999A	0.001A	±(0.5FS+0.001)	0.001A	±(0.5FS+0.001)
Power factor	0~1.000	0.001	±(0.5FS+0.001)	0.001	±(0.5FS+0.001)
Carbon emissions	0~9999Kg	0.001Kg	±(0.5FS+0.1)	0.1Kg	±(0.5FS+0.1)
Annual	0~9999KWh	0.1KWh	±(0.5FS+0.1)	0.1KWh	±(0.5FS+0.1)

Electricity Consumption					
Energy	0~99999KWh	0.01Wh[2]	±(0.5FS+0.01) [2]	0.01Wh[2]	±(0.5FS+0.01) [2]
Frenquency [3]	45~65Hz	0.1Hz	±(0.5FS+0.1)		
Temperature [4]	-10~110℃			0.1℃	±(0.5FS+0.1)

*Note:[1] When power <100W, the Power Resolution is 0.01W,the a*ccuracy of measurement is*±(0.5FS+0.01),when power >=100W the Power Resolution is 0.1W, the a*ccuracy of measurement is*±(0.5FS+0.1)*

*[2] When energy<0.1KWh the Energy Resolution is 0.01Wh, the a*ccuracy of measurement is*±(0.5FS+0.01),When energy>=0.1KWh ,the Energy Resolution will adjust according to the measured results. the accuracy of measurement is±(0.5FS+1 the lowest shows)*

[3] Only applies for EPM6600.

[4] Only applies for EPM6600-T.

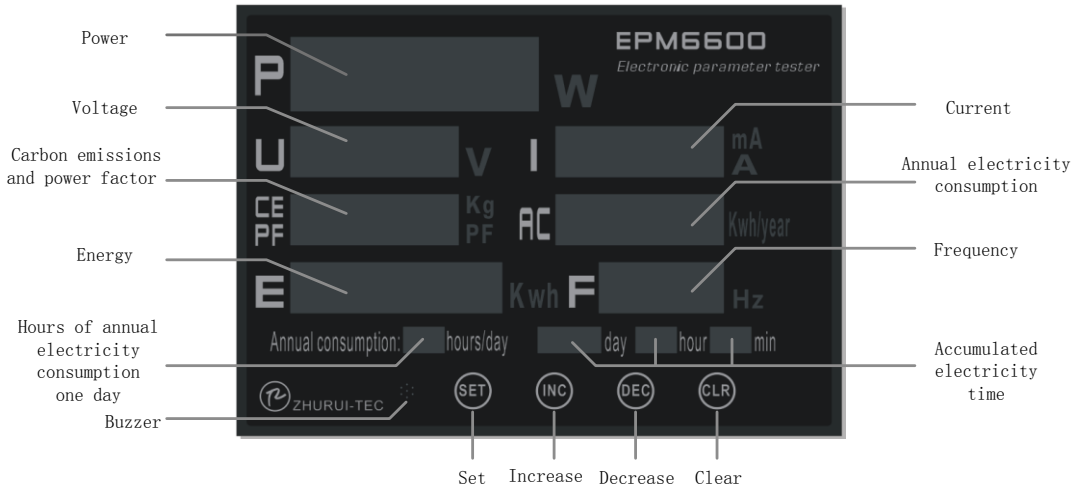
Other index

Work voltage	AC85~265V	Work frequency	45~65Hz
Temperature	0~40℃	Humidity	≤90%RH
Boundary dimension	186mmx133mmx36.5mm[1]	hole size	180mmx127mm
Weight	390g[2]	Installation way	flushbonading

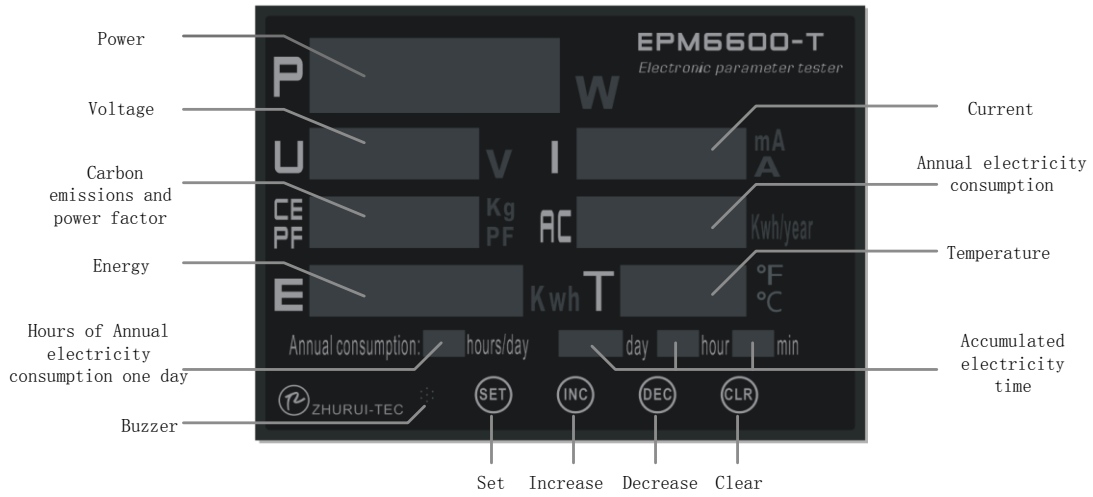
Note:[1]. This size is not included the holder size, if included the size *is 195mmx133mmx40.5mm.*

[2].This weight includes the holder weight.

Panel illustrate

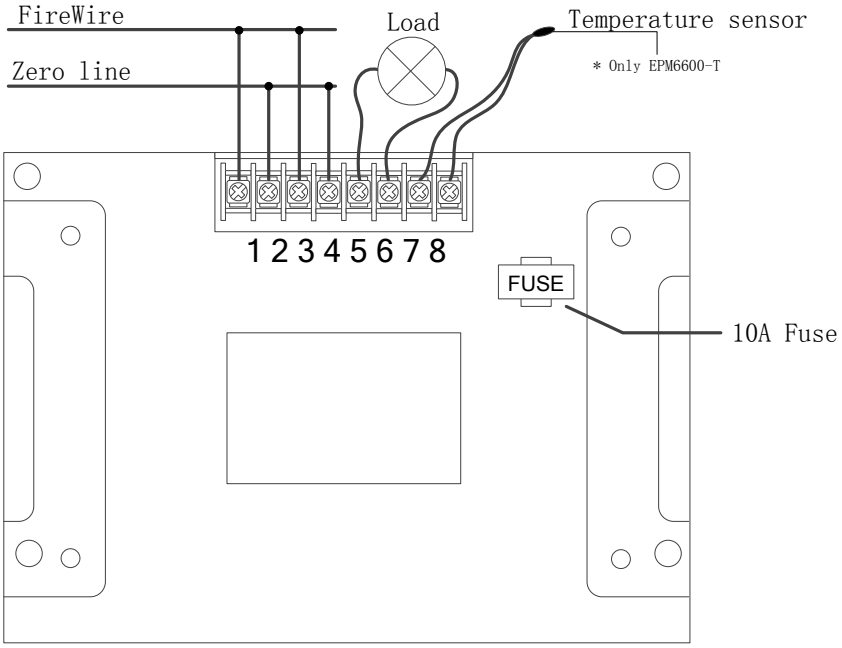


EPM6600 panel structure



EPM6600-T panel structure

Wiring instructions



1,2 binding posts are the power supply for the meter, the scope of input voltage is AC85~265V；

3,4 binding posts are the power supply for the Loads, the scope of input voltage is AC0~275V；

5,6 binding posts are the output for the Loads, which will be connected to the Loads, its output voltage is the same with 3,4 binding posts

7,8 binding posts connected with the temperature The sensor (Only EPM6600-T;for EPM6600 this two posts won't be connected, Ban to touch the posts, in order to avoid electric shock)

** Under normal conditions (for 110V or220V,* binding posts *1 and 3 are connected with the wire together,2 and 4 are connected with The zero line)*

Functions

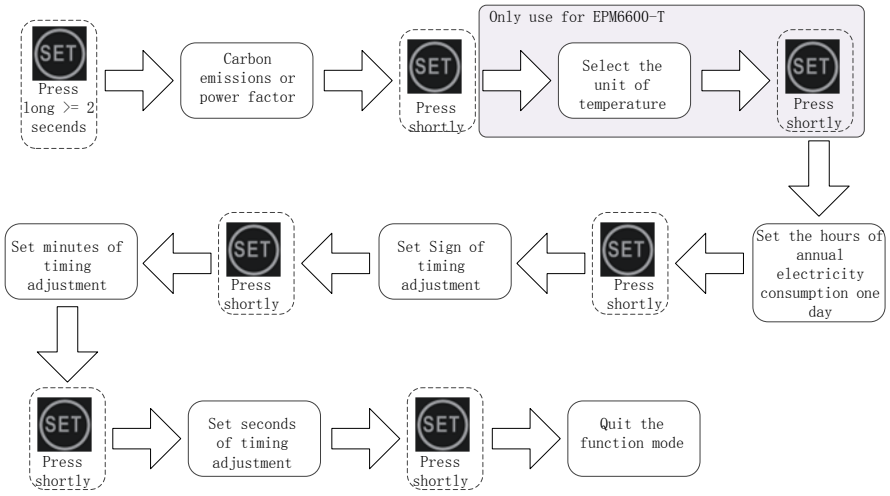
1. Power measurement result is active power;
2. Voltage and Current results are virtual value;
3. Annual carbon emissions is calculated according to the annual electricity consumption, Annual carbon emissions = annual electricity consumption×carbon emissions factor, Real-time carbon emissions=energy×carbon emissions factor (its' default is 0.785,it can be set if needed), unit: Kg;
4. Annual electricity consumption is calculated according to 365 days, hours in one day can be set.
5. Total electricity time has three columns: days, hours and minutes, the maximum is 999 days 23 hours 59 minutes;
6. If the power is off, the Energy value ,Real-time carbon emissions and total electricity time are clear;
7. The hours of Annual electricity consumption set one day can impact the value of Annual electricity consumption and Annual carbon emissions;
8. When entry the adjustment mode of the total electricity time, the hours window can display +/-, if the Sign is positive ,it displays "P", if the Sign is negative, it displays "N", the hours window displays the minutes after adjustment, the minutes window displays the seconds after adjustment;
9. The method of adjust the Accumulated electricity time: if the meter's time is slower than Standard time, then it needs to plus the lack time, if the meter's time is faster than Standard time, then it needs to minus the surplus time. f.g: the time parameter adjusted is -2minutes 30 seconds in the meter, and in fact the meter is slower 3 minutes and 50 seconds than the Standard time, then the time parameter adjusted in the meter is 1minutes and 20 seconds(-2'30"+3'50"= +1'20").

Function set

The button set

The button	The button name	The button function states
	Set	Press>2 s into the Set function, then press short time to switch to different setting
	Increase	Press once time and the parameter value +1,or switch to different functions
	Decrease	Press once time and the parameter value -1,or switch to different functions
	Clear	In working condition, press this button will clear the energy , Real-time carbon emissions and total electricity time

Function setup process



☞ Select Carbon emissions or Power factor

1. See Function setup process, entry the mode of Carbon emissions or Power factor, then the light in the window display units of carbon emissions and power factor will be flashing;
2. Press the Increase button INC or Decrease button DEC, select Carbon emissions or Power factor, after that the light of selected unit is on ;
3. According the graphic of the function setup process, quit the function setting mode .

☞ Set the unit of temperature (Only EPM6600-T)

1. See Function setup process, entry the mode of the temperature unit, and the light in the window display unit of temperature will be flashing;
2. Press the Increase button INC or Decrease button DEC,select ℃ or Fahrenheit, after that the light of selected unit is on ;
3. According the graphic of the function setup process, quit the function setting mode .

☞ Set the hours in one day of Annual electricity consumption

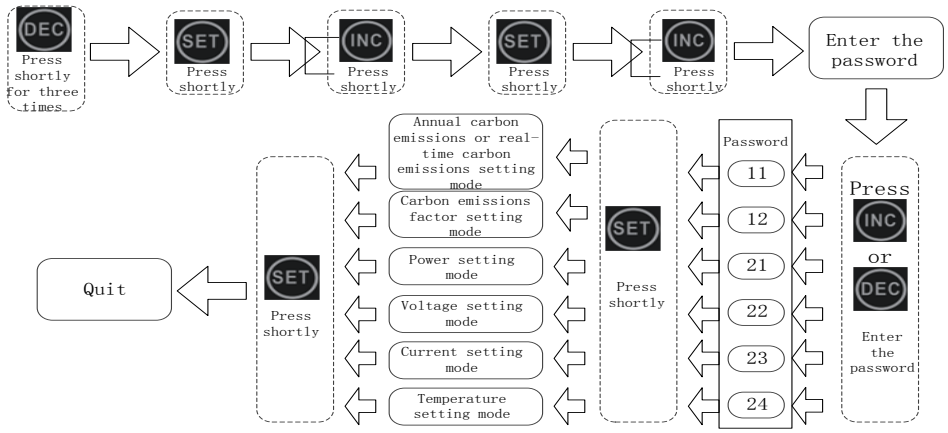
1. See Function setup process, entry the hours set mode of Annual electricity consumption one day, then the light in the widow of display units of Annual electricity consumption will be flashing;
2. Press the Increase button INC or Decrease button DEC to set the hours one day of Annual electricity consumption;
3. According the graphic of the function setup process, quit the function setting mode .

☞ Timing Adjustment (Slow the timing of 3 minutes and 50 seconds one day as an example)

1. See Function setup process, entry the Sign set mode of the timing, then the days window display P or N, and be flashing;
2. If it display N, since the timing of the meter is slower than the standard time, so it needs to press the Increase button INC or Decrease button DEC to adjust the signal to P(if the timing of the meter is faster than the standard time, then adjust the signal to N);
3. Shortly press the Set button SET, entry the minutes set mode of timing.
4. Press the Increase button INC, plus 3 on the basis of the minutes ;
5. Shortly press the Set button SET, entry the seconds set mode of timing;
6. Press the Increase button INC, plus 50 on the basis of the seconds;
7. According the graphic of the function setup process, quit the function setting mode .
8. Clear the Energy and Accumulated electricity time.

☞ In working condition pressing Clear button CLR could clear the Energy, Real-time carbon emissions and Accumulated electricity time.

Parameter settings and fine-tune the process of measurement



☞ Set Annual carbon emissions or Real-time carbon emissions

1. See parameters setting and measured value adjustment flow chart, entry the mode of Annual carbon emissions or Real-time carbon emissions, then the light will be flashing in the carbon emissions and power factor window ;

2. Press the Increase button INC or Decrease DEC to choose the Annual carbon emissions or Real-time carbon emissions, 0 is Annual carbon emissions,1 is Real-time carbon emissions;

3. Press Set button SET, Save the Setting and quit; press the Clear CLR not to save the Setting and quit.

☞ Set the carbon emissions factor

1. See parameters setting and measured value adjustment flow chart, entry the mode of carbon emissions setting, then the light will be flashing in the window of carbon emissions and power factor;
2. Press the Increase button INC or Decrease DEC to set the carbon emissions factor, the carbon emissions can be set between 0.5-2.0;
3. Press the Set button SET,save the setting and quit; press the Clear CLR not to save the setting and quit.

☞ Adjust the power value

1. See parameters setting and measured value adjustment flow chart, entry the mode of power value adjustment, then the light will be flashing in the window of power value.
2. Press the Increase button INC or Decrease DEC to adjust the power value;
3. Press the Set button SET,save the setting and quit; press the Clear CLR not to save the setting and quit.

☞ Adjust the Voltage

1. See parameters setting and measured value adjustment flow chart, entry the mode of voltage adjustment, then the light will be flashing in the window of voltage;
2. Press the Increase button INC or Decrease DEC to adjust voltage.
3. Press the Set button SET,save the setting and quit; press the Clear CLR not to save the setting and quit.

☞ Adjust the Current.

1. See parameters setting and measured value adjustment flow chart, entry the mode of Current adjustment, then the light will be flashing in the window of Current;

2.Press the Increase button  or Decrease  to adjust Current.

3.Press the Set button ,save the setting and quit; press the Clear  not to save the setting and quit.

☞ Adjust the temperature(Only EPM6600-T)

1. See parameters setting and measured value adjustment flow chart, entry the mode of Current adjustment, then the light will be flashing in the window of Current;
2. Press the Increase button  or Decrease  to adjust Temperature.
3. Press the Set button ,save the setting and quit; press the Clear  not to save the setting and quit.

☞ Restore the factory settings

1. Shortly press the Decrease button  three times;
2. Shortly press the Increase button  three times;
3. Shortly press the Set button  three times, then the whole screen flicker;
4. Shortly press the Clear button  and restore the factory settings.

**When setting, press the Increase*  *or Decrease button*  *for a long time can adjust quickly .*

Matters needing attention

1. The meter can't work in hot and humid conditions，please use it In normal conditions;
2. This meter measures Ac parameters, can't measure DC parameters;
3. The meter work voltage can't exceed AC265V, measure voltage can't exceed AC275V;
4. If work current >10A or the load cutting-out could lead to the fuse burned, then need to replace a new fuse=10A;
5. Do not expose the meter to dusty , corrosive gases and other harmful substances in the environment when store and using;
6. Don't touch the 1~6 pins when using, These pins with high voltage can cause electric shock
7. For EPM6600, 7,8 pins are not isolated , not touch the pin to avoid risk of electric shock when using.
8. Don't let the children touch the meter when using.

Frequently problems

1. The meter doesn't shine with Power supply, then Check the power cord connection;
2. The meter only display Voltage, Frequency[1] and Temperature[2] after connected with power cord, the other parameters show "0",which may be the Fuse damaged, and needs to replace a new Fuse;
3. The temperature show "LLL", which means the sensor is off, check and connect the temperature sensor[3]。

Note:[1].Only applies for EPM6600；

[2],[3].Only apply for EPM6600-T。

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