

User manual

Description of header parameters:

MODEL: PLT10

① Power Efficiency	② Annual Consumption
<input type="text"/> %	<input type="text"/> Kwh
③ AC Voltage	④ AC Current
<input type="text"/> V	<input type="text"/> A
⑤ Frequency	⑥ Power Factor
<input type="text"/> Hz	<input type="text"/>
⑦ AC Power	⑧ DC Power
<input type="text"/> W	<input type="text"/> W
⑨ DC Voltage	⑩ DC Current
<input type="text"/> V	<input type="text"/> A

MODEL: PLT10S-Two Color Drive

③ AC Voltage	④ AC Current
<input type="text"/> V	<input type="text"/> A
⑥ Power Factor	⑦ AC Power
<input type="text"/>	<input type="text"/> W
① Power Efficiency	⑧ DC Power (ALL)
<input type="text"/> %	<input type="text"/> W
⑨ DC Voltage 1	⑩ DC Current 1
<input type="text"/> V	<input type="text"/> A
⑨ DC Voltage 2	⑩ DC Current 2
<input type="text"/> V	<input type="text"/> A

MODEL: PLT07

① Power Efficiency	
<input type="text"/> %	
③ AC Voltage	④ AC Current
<input type="text"/> V	<input type="text"/> A
⑦ AC Power	⑥ Power Factor
<input type="text"/> W	<input type="text"/> (PF)
⑨ DC Voltage	⑩ DC Current
<input type="text"/> V	<input type="text"/> A

Formula of calculation:

$$\text{Total power} = \text{③ AC Voltage} \times \text{④ AC Current}$$

$$\text{⑦ AC Power} = \text{③ AC Voltage} \times \text{④ AC Current} \times \text{⑥ PF}$$

$$\text{⑧ DC Power} = \text{⑨ DC Voltage} \times \text{⑩ DC Current}$$

$$\text{Total Power} = \text{⑦ AC Power} + \text{Reactive power}$$

$$\text{① Efficiency} = \frac{\text{⑧ DcPower}}{\text{⑦ AcPower}} = \frac{\text{⑨ DcVoltage} \times \text{⑩ DcCurrent}}{\text{③ AcVoltage} \times \text{④ AcCurrent} \times \text{⑥ PF}}$$

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Description of header parameters:

- Power efficiency: According to the input information of the power supply, and the output information of the power supply, the luminous efficiency of the power supply is calculated. The input power of the power supply is not all used for light, and some are used for the power supply itself to dissipate. The value is to measure the efficiency of the LED power supply for light. At present, the power supply is mostly above 0.6~0.9.
 - Annual electricity consumption: The power supply/finished lamp in a year, 24 hours a day, the amount of electricity required. If you want to get 12 hours of electricity a day, cut the reading in half.
 - AC Voltage: LED power supply voltage.
 - AC Current: The total current used by the power supply.
 - Frequency: Show the frequency of the current grid.
 - Power factor: In the total power, the ratio of the effective power to the total power. It is used to evaluate the pollution degree of LED power supply to the power grid, and it is particularly important when the product is exported. According to the Energy Star of the United States, the power factor of LED lamps with power less than 5 watts is not required. More than 5 watts requires a power factor above 0.7. China now uses the same rules as the United States. But the Shenzhen LED Industry Standard Alliance standard provisions 10W, PF> 0.7; Power between 10W-30W, PF> 0.85; Power > 30W, PF> 0.9. It's higher than the national regulation.
 - AC power: that is, active power, the actual power used by the LED power supply. We often say that the 3W drive, 7W drive.....They are referred to this parameter, but also to measure whether the power supply is "sufficient power" standard, the power is the real power consumption.
 - DC voltage: the actual DC output voltage value of the power supply to the LED lamp beads.
 - DC current: the actual DC output current value of the power supply to the LED lamp beads.
- Summary:
- In two LED power supplies/finished products with the same nominal power, the input power is closer to the nominal, the quality is better.
 - Two LED power supplies/finished products with similar display input power, the higher the power factor, the better.
 - Two LED power supplies with similar display input power, the higher the power efficiency, the better.

LED Power Test Assistant

Wide voltage safety protection type

MODEL: PLT07
MODEL: PLT10
MODEL: PLT10S-Two Color Drive

Manual

Ac voltage 85V~265V
Explosion-proof lamp + fuse, can prevent the problem to be tested to burn out the circuit.

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Use Required reading:

Thank you for using PLT series products, "LED Power Test Assistant", please carefully read this product manual and related application manual before use.

The use of this product must comply with relevant laws and regulations and be operated by qualified authorized personnel. Maintenance or repair of this product shall only be performed by authorized personnel. Note that performing unauthorized repairs may affect the warranty. Data in this manual are subject to change without notice.

List of products:

- 1、LED power test box
- 2、Fuse
- 3、Manual

Selection list:

Model	Support	Parameters
PLT07	Finished product lamp led driver	AC Voltage/Current/Power/PF DC Voltage/Current/Efficiency
PLT10	Finished product lamp led driver	AC Voltage/Current/Power/PF AC Annualconsumption DC Voltage/Current/Power/Efficiency
PLT10S	Finished product lamp Dual color led drive	AC Voltage/Current/Power/PF Dual Color DC Voltage/Current/Power/Efficiency

Electrical parameters:

Supply voltage	90~260VAC
AC Voltage	0~300VAC , Accuracy Class: 0.5%
AC Current	0~2A , Accuracy Class: 0.5%
Power Factor	0~0.999 , Accuracy Class: 0.5%
AC Power	0~600W , Accuracy Class: 0.5%
Frequency	0~100HZ , Accuracy Class: 1%
Annual Consumption	0~9999KWH
DC Power	0~300W , Accuracy Class: 0.5%
DC Voltage	0~220V , Accuracy Class: 0.5%
DC Current	0~3A , Accuracy Class: 1%
Power Efficiency	0~1

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Using the Wizard:

Note:

1. Test semi-finished products, to prevent short circuit, the upper right corner of the explosion-proof light switch to "use explosion-proof".
2. If you need accurate test data, the explosion-proof lamp switch to "do not use", turn off the explosion-proof lamp function.

Test finished lamp:

Please use "E14", "E27", "AC load" to access the test products, the test process can test: input AC voltage, input AC current, input power factor, input effective power.

Test drive power supply:

The input of the drive power supply is connected to the "drive input", the drive power output is connected to the "drive output", the load (lamp beads) is connected to the "lamp beads", and the alligator line can be used to clip the load (lamp beads) according to the need. The test process can test: input AC voltage, input AC current, input power factor, input effective power, output voltage, output current, power efficiency.

Precautions and use of explosion-proof lamp

The use of explosion-proof lamp:

Explosion-proof lamp, used to test semi-finished drive power (the power supply without electricity), or semi-finished lamp (the lamp without electricity), to avoid the power explosion caused by the internal short circuit of the test product.

Use of explosion-proof lamp:

First of all, the small switch on the right, dial to the "0", and then in the "explosion-proof lamp" socket access explosion-proof lamp(tungsten bulb), that it can work. If the explosion-proof light is on, that means there is a problem with the tested product, which should be eliminated immediately.

Turn off the explosion-proof lamp for accurate measurement:

As the existence of explosion-proof lamp will affect the test results, the degree of influence with the test power becomes larger and larger. If you need to get accurate test results, that put the small switch on the right, dial to the "-", then it will not use explosion-proof lamp function, accurate data you can get.

Mark:

1. Please turn on the explosion-proof lamp when testing the semi-finished product (i.e., no electricity is passed), and turn on the explosion-proof function that can prevent the explosion of the tested product in question. For accurate measurement data, please turn off the explosion-proof lamp function.
2. If this product suddenly does not light up and cannot be used, please check the explosion-proof fuse on the side of the product. If it is burned out, please replace the fuse.

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PLT10S using wizard:

1.Double color drive test wiring diagram

