



## PE-N45WCA

Dimmable on Brightness & CCT

LED Driver



### Features:

- The dimmable driver is directly controlled by the mobile phone, convenient and quick
- Many people can use it at the same time
- Color temperature and brightness can be controlled
- Protections: Over current & Over voltage
- Natural cool air
- Wire terminal connect conveniently
- Suitable for LED home lighting and commercial lighting
- No load safe protective device
- Simple installation
- Measure up to the world lighting equipment safety standard
- Protection class II
- There year warranty

### Description

PE-N45WCA Color dimming LED driver is the constant current dimming driver developed by our company with high power factor, high efficiency, high precision, the use of the efficient stable low loss switch control chip and the high performance components makes it with low noise, energy saving, environmental protection, long life and other characteristics.

Use WIFI signal control, and mobile phone APP "Smart Life" control software to adjust lighting and color.

The output of cool and warm lights can be controlled by mixing and adjusting.

It can be shared to third parties for more than one person.

For the APP, please refer to the APP user's manual (Light) at another file .

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## Product performance parameters

## 1. Electric Features

	Model	PE-N45WCA4270	PE-N45WCA42100
Output	output power	29.4W	42W
	constant voltage	25-42	25-42
	constant current	700mA	1000mA
	current precision	±5%	±5%
	ripple	400mVp-p	400mVp-p
	start-up time	<600mS	<600mS
Input	voltage range	200-265V	200-265V
	frequency range	47-63Hz	47-63Hz
	PF	PF>0.94	PF>0.95
	Efficiency	0.85@AC200V 0.85@AC265V	0.86@AC200V 0.86@AC265V
	AC Current	160mA	209mA
Protection	open circuit	voltage limiting protection model, the output voltage is the max voltage.	
	over current	constant current limit, it isn't possible to over current	
	over voltage	45V	
Environment	Operating temperature	-20~ +45°C	
	Operating humidity	10-85%RH	
	storage temperature humidity	-40~ 85°C 10~85%RH	
	temperature coefficient	±0.03%/°C(0-50°C)	
Safety and EMC	safety specification	EN 61347-2-13: 2006 /EN 61347-1:2008	
	Withstand voltage	I/P-O/P: 3.75KVAC	
	Insulation resistance	I/P-O/P: 100M Ohms / 500VDC /25°C/70%RH	
	EMI	EN55015	
	harmonic current	EN6000-3-2/EN6000-3-3	
	Electromagnetic susceptibility	EN6000-4-2	
Others	size	(L*W*H) = 190*43*30mm	
	package		

**Remark:**

1. All the parameters are test on AC220V, rated load, temperature 25°C
2. The driver is regarded as one part of the whole products, so the EMC of the whole products need to be tested again.

## 2. Burn-in test

### 2.1 Long term aging test

A certain number of products are randomly sampled at normal temperature to be burn-in test for long time, With multiple-channel life inspection instrument do the switching simulation test of 50 seconds turn on then 10 seconds power off under the input voltage of 240V , the switch cycle is 4000 times under the maximum output state of the product.

### Product long term aging test Report

Input Voltage	Output Load	Shell temperature rise	Required aging time	Actual aging time	State
240V	42V/700mA	≤40°C	72H	72H	OK
240V	42V/1000mA	≤40°C	72H	72H	OK

Note: The input 240V full load , repeated switch to simulate the test with multiple-channel life inspection instrument during the product burn in test, the ambient temperature of the aging room is generally at 23-30 C. (relative to the outside temperature, higher in summer temperature.)

### 2.2 Withstand voltage test

The use of Withstand Voltage tester TH2811D, respectively short circuit input and output, high voltage connection input end, connect ground , connect output and then in 10 seconds the voltage rises from 0 to AC3750V, keep 50 seconds, during the period, no fire , no alarm, leakage current is less than 2mA.

### 2.3 Surge lightning test

Waveform data: 1.2/50μs

Test voltage: 2000V

At experimental voltage condition, exert surge pulse for three times respectively at the 0° phase, 90° phase, 180° phase and 270° phase, the time interval between continuous pulses is 20S.

### 2.4 Flicker test

There are two evaluation parameters for the luminaire flicker at IEEE Std 1789-2015, flicker percent and flicker index , using flicker tester to collect relevant data in the case of input 240V and different brightness output.

### Flicker test report table



## LED dimming driver

PE-N45WCA

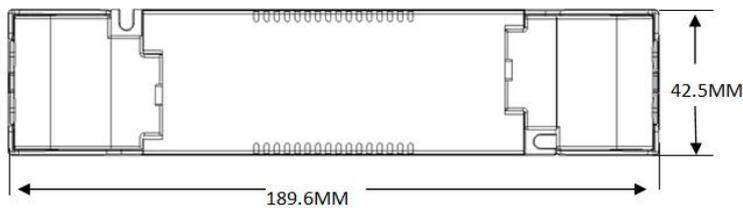
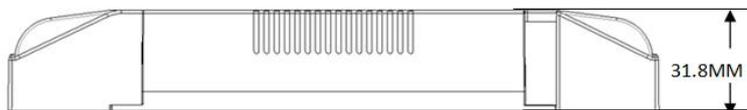
Model	Output	Output	Brightness	Flicker Frequency	Flicker index	Flicker percent	Result
PE-N45WCA	AC240V	42V 1A	100%	7462.7Hz	0.022	19.4%	No Flicker
			50%	1004.0Hz	0.462	99.1%	Flicker

Note:

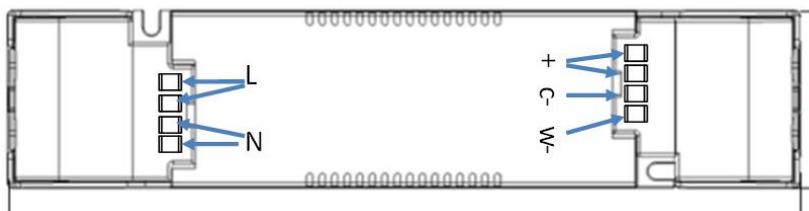
At the frequency of alternating current 50Hz, the frequency of the domestic lamps and lanterns is 100Hz, and the luminaire flicker percentage is less than 3.2%. which is the limit range of flicker free harm. The flicker percentage is 8% included the low risk range , and the luminaire flicker is a safe range. If the flicker percent is more than 8%, the lighting product can be seen as a flicker luminaire.

### 2.6 Standard operation

Product Dimension



Dimming Operation Method



### 3. Guidance

Input and output lines should be connected according to product identification, attention to positive and negative

Note:

1. Please note the input and output, confirm the wires are right then electrify.
2. First connect the load of the DC output terminal, confirm it is right then electrify. If it is open circuit please turn off the power, wait for the electrical release, then put on the LED, or it will burn out the LED.
3. This driver is for LED light/lamp, input voltage range is AC90-250V, Output voltage is DC25-42V, the



maximum of output current range is 0-1000mA, The ambient temperature range is from -20 Celsius to 45 Celsius. And the surface can not cover the insulation cotton and other items that block the heat dissipation of the product. This product has a 3-year free warranty in an environment that meets the conditions of use of the product.

### **Abnormal phenomenon and the appropriate solutions:**

1. After installed, If the light is not lit when you turn on at the first time, please cut down the AC input and check:
  - a) Make sure the DC output is connected.
  - b) Ensure that the positive and negative terminals of the DC output are reversed, and LED board has soldering in right way.
  - c) There is no contact failure at the AC input; test again after eliminating the above faults.
2. After the electrical connection is made, the LED lights up, but the LED flashes. Please turn off the AC input and check the DC output.:
  - a) Whether its overload or under-load;
  - b) The LED driver's parameters do not match the usage parameters.
3. If there is any problem you encountered when you using our driver, please contact us in time, We will be happy to help you solve the problem.

### **Statement:**

Pictures and specifications only for reference.