

PE-N14AA 14.7W

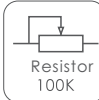
PE-N20AA 21W

**Features:**

- Integrated 0-10V/1-10V/10V PWM/100k resistor dimming
- Output flicker free
- International universal AC input voltage(100-265VAC)
- Protections: short circuit-over voltage/over current
- Silica gel heat conduction technology, natural cold wind
- Built-in MCU, will adaptive 0-10V and 1-10V
- Dimming range 0-100%
- Quick press terminal, safe and convenient
- The internal design signal is connected to the reverse circuit, one of which will not affect the control of other driver
- Protection class II
- Five years warranty



5 years

**RoHS SELV Class 2****General description:**

0-10V/1-10V/10V PWM/100K resistor dimming driver is one of the constant current dimming LED driver developed by my 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.

PE-N14AA/PE-N20AA have five dimming function ,use the DIP switch to choose the PUSH dimming.

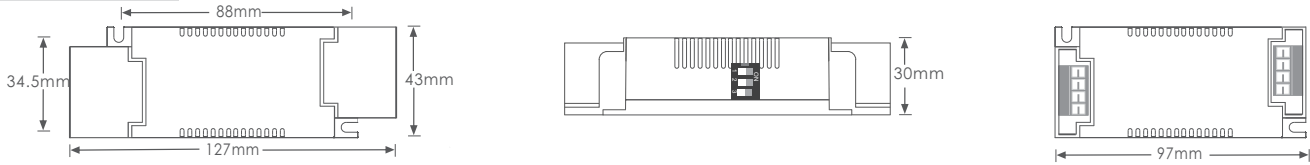
1.Dimming interface:1.0-10V dimming, use standard 0-10V/100K 10V PWM dimming

2.PUSH dimming

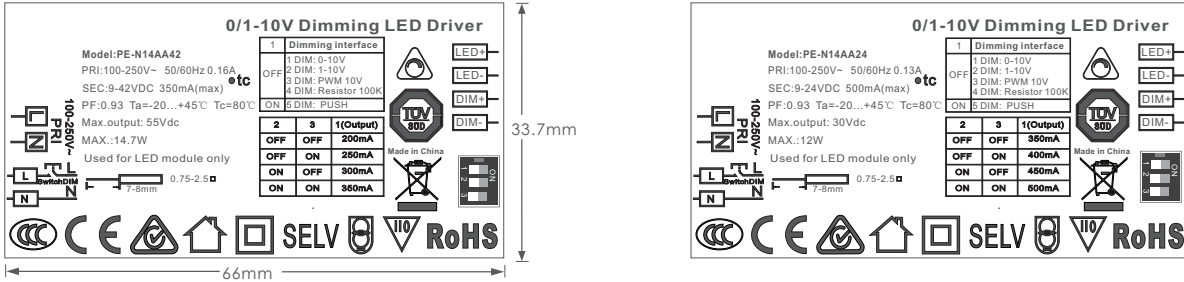
Specification:

Model		PE-N14AA24	PE-N14AA42	PE-N20AA24	PE-N20AA42
OUTPUT	Output Voltage	9-24Vdc	9-42Vdc	9-24Vdc	9-42Vdc
	Max Output Voltage	24Vdc	42Vdc	24Vdc	42Vdc
	Non-load Output Voltage	30Vdc	50Vdc	30Vdc	30Vdc
	Output Current	350/400/450/500mA	200/250/300/350mA	650/700/750/800mA	350/400/450/500mA
	Output Power	2.7W~12W	1.8W~14.7W	5.85W~19.2W	3.15W~21W
	Strobe Level	No Flicker			
	Dimming Range	0~100%, LEDstart at 0.03%possible.			
	PWM Dimming Frequency	>3600Hz			
	Current Accuracy	±3%			
Ripple & Noise	=2V (No dimming)				
INPUT	Dimming Interface	0-10V/1-10V/10V PWM/100K resistance , Signal control current < 0.1mA			
	Input Voltage Range	100-250Vac			
	Frequency	50/60Hz			
	Input Current	<0.13A	<0.16A	<0.27A	<0.27A
	Power Factor	PF>0.95/100Vac, at full load	PF>0.95/100V ac, at full load	PF>0.95/100V ac, at full load	PF>0.95/100V ac, at full load
	THD	230Vac@THD ≤15% (full load)			
	Efficiency(typ.)	80.5%	83%	83%	85%
	Inrush Current(typ.)	Cold start 1.78A@230Vac	Cold start 2.34A@230Vac	Cold start 2.43A@230Vac	Cold start 2.43A@230Vac
	Anti Surge	L-N: 2kV			
Leakage Current	<0.25mA/230Vac				
ENVIRONMENT	Working Temperature	ta: 45°C tc: 80°C			
	Working Humidity	20 ~ 95%RH, non-condensing			
	Storage Temp., Humidity	-40 ~ 80 °C, 10~95%RH			
	Temp. Coefficient	±0.03%/°C(0-50) °C			
Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.				
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, , auto recovers.			
	Over Load Protection	Shut down the output when rated power≥102%, auto recovers.			
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.			
	Non-load Protection	output Constant Voltage.			
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac			
	Isolation Resistance	I/P-O/P: 100MΩ /500VDC/25°C/70%RH			
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13			
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3			
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547			
	Strobe Test Standard	IEEE 1789			
OTHERS	Dimension	127.5(97)×43×30mm(L×W×H)			
	Packing	PE bag			
	Weight(G.W.)	116g±10g			

Dimensions :



Product Label



LED Current Selection :

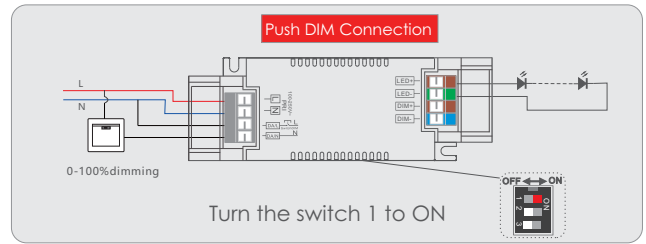
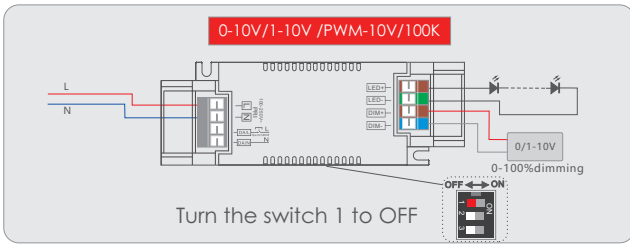
2 and 3 are the DIP switch for 4 optional currents' quick selection, 1 is the switch select dimming function(see the table below).

Model	DIP Switch	DIP Switch				Model	DIP Switch				ON-OFF
		1	2	3	4		1	2	3	4	
PE-N14AA24	Output Current	350mA	400mA	450mA	500mA	PE-N14AA42	200mA	250mA	300mA	350mA	ON-OFF
	Output Voltage	9-24V	9-24V	9-24V	9-24V		9-42V	9-42V	9-42V	9-42V	
	Output Power	3.15W-8.5W	3.6W-9.6W	4.05W-10.8W	4.5W-12W		1.8W-8.4W	2.25W-10.5W	2.7W-12.6W	3.15W-14.7W	
PE-N20AA24	Output Current	650mA	700mA	750mA	800mA	PE-N20AA42	350mA	400mA	450mA	500mA	ON-OFF
	Output Voltage	9-24V	9-24V	9-24V	9-24V		9-42V	9-42V	9-42V	9-42V	
	Output Power	5.85W-15.6W	6.3W-16.8W	6.75W-18W	7.2W-19.2W		3.15W-14.7W	3.6W-16.8W	4.05W-18.9W	4.5W-21W	

* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 9-24V can power 3-7pcs LEDs in series, 9-42V can power 3-12pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

LED Current Selection :



Push Dimming :

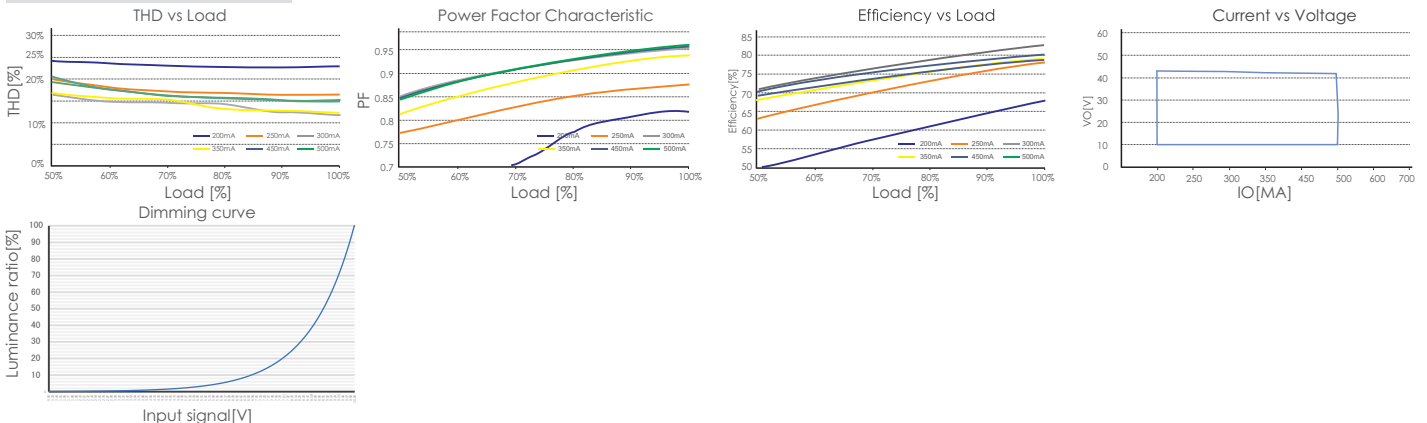


- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

Wiring:

- 1.PUSH interface: AC voltage is connected to Dali two ports through a switch with automatic reset to realize key dimming. Single press switch function, long press dimming.
- 2.0-10V interface:0-10V dimmer interface, 100k resistance dimmer without positive and negative, 0 / 1-10V dimmer with positive and negative.
- 3.Do not connect voltage higher than 10V at 0-10V interface.
- 4.The input terminal: wire gauge 22AWG-14AWG (0.5mm² – 1.5mm²)wire stripping requirement:9-10mm.
- 5.The output terminal: wire gauge 22AWG-12AWG (0.5mm² – 1.5mm²)wire stripping requirement :6-7mm.

Relationship Diagrams:



The use of guidance:

- **1. please pay attention to the distinction between input and output, connect correctly, then power on.
- **2. please connect first the load of the DC output, open the driver after checking; in the constant current mode, if power on at open circuit, please turn off the driver and can't connect the LED until the electric energy stored by the output release, or it may damage the LED.
- **3. this type of driver is only limited to the use of the LED lamps, the input voltage range is AC100-265V, the heat insulation cotton and other items that obstruct the heat dissipation of the product, which conforms to the product under the specified output voltage, current range, the use environment temperature is -20-45 degrees, and the surface can not cover the conditions of the environment, this product enjoys five years of free warranty.

The abnormal conditions and the corresponding treatment methods:

1. the LED lamp doesn't bright after the driver is connected at the first time, please turn off the AC input and check as follow:
 - 1) whether or not DC output bad contact.
 - 2) whether DC output polarity is reversed, or the LED board is welded anti.
 - 3) whether AC input is bad contact, test after eliminating these failures.
2. the device has good connection, LED lights, but the LED flicker, please turn off the AC input and check as follow:
 - 1) whether or not the parameters and actual parameters match.
 - 2) please timely communicate with us if you have any questions in the using, we will try our best to solve the problems with you.

Statement:

The pictures and specifications is for reference only, in kind prevail, specifications are subject to change with further notice.

Difference between 0-10V and 1-10V:

1. When the 0 / 10V dimmer is adjusted to the maximum 10V, the output current will reach 100% of the power output, and the brightness will reach 100%. When the 0-10V dimmer is adjusted to 0V, the current will be the minimum, and the light will be turned off; When the 1-10V dimming is adjusted to 1V, the current is the minimum and the light is off.
2. Difference between 0-10V and 1-10V dimming: different starting and closing voltage, 0-10V is on at 0.7V, (the min brightness) 1-10V is on at 1.2V (the min brightness).
3. Digital dimming driver 0-10V and 1-10V dimming automatic identification two dimming modes.
4. The same signal circuit controls light and dark at the same time.
5. Dimmer (dimming system) is divided into 0-10V and 1-10V dimming signals.
6. Dimming compatibility is related to the control distance of signal line and the number of control power supply. If the number is too large or the signal line is too long, problems such as can not adjusted lower and can not adjusted off will occur.