

## PE-IL100DV 100W



[ 5 years ]  **RoHS SELV CE Class 2**



### Features:

1. Dali standard interface complies with Dali 144 standards
2. Dali2 certification, Dali member
3. Digital control output is adopted, and there is no stroboscopic
4. International general AC input 100-250V range
5. Natural air cooling, moisture-proof, heat conduction, silica gel heat dissipation process
6. Self developed depth dimming curve
7. Multiple protection functions
8. Special aluminum welding process, ultra small volume design
9. Comply with ERP standard, and the standby power consumption is less than 0.5W

### Application:

1. LED light strip
2. Villa intelligent lighting
3. It can be connected to Dali intelligent lighting system
4. Museum lighting

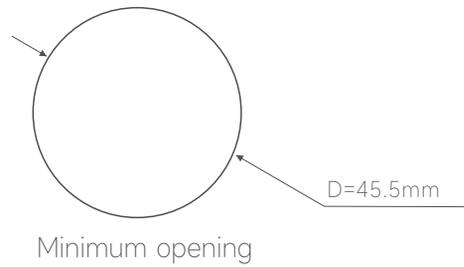
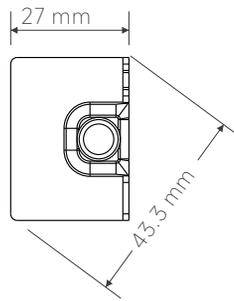
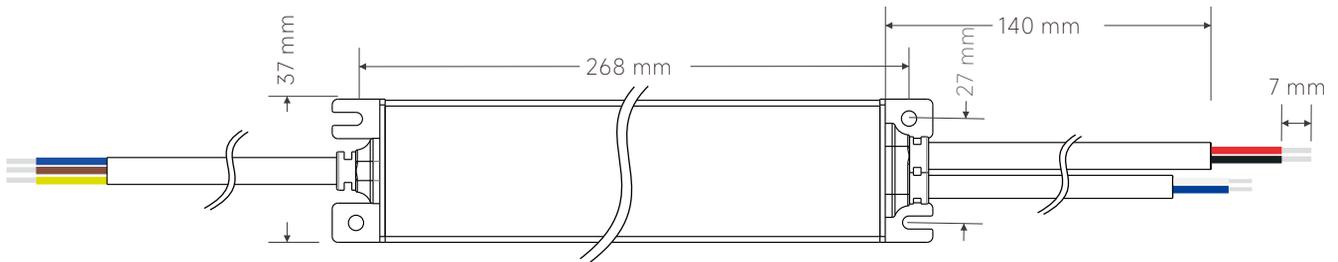
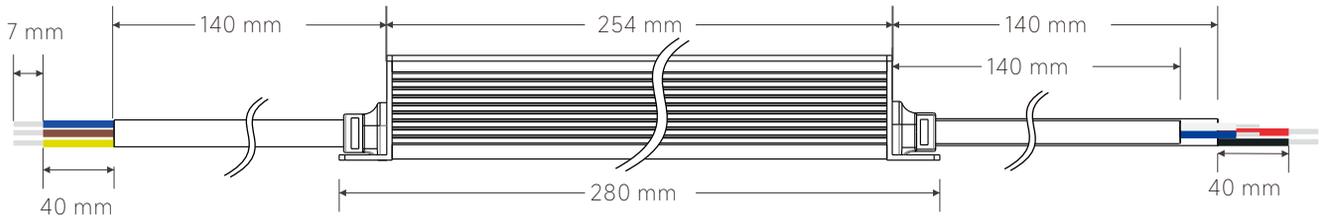
### General description:

Special aluminum shell welding process, aluminum shell and internal heat conduction silica gel heat dissipation, more stable use, all raw materials are first-line brands, and imported chips exceed The deep dimming design matches the intelligent dimming system of various brands in the market Anti surge voltage 2KV, smooth dimming, no stroboscopic, low noise in dimming process

## Specification:

Model		PE-IL100DV24	PE-IL100DV12
OUTPUT	Output Voltage	24Vdc	12Vdc
	Max Output Voltage	4.2A	8.3A
	No load output voltage	24Vdc	12Vdc
	Load power range	0-4.2A	0-8.3A
	Output Power	0-100W	0-100W
	Strobe Level	No Flicker	
	Dimming Range	0~100%, LEDstart at 0.03%possible.	
	PWM Dimming Frequency	>3600Hz	
	Current Accuracy	±3%	
	Power down mode	memory function when power down	
INPUT	Dimming Interface	DALI (IEC62386)Signal control current < 2mA	
	Input Voltage Range	100-250Vac	
	Frequency	50/60Hz	
	Input Current	<1.2A ac100v	
	Power Factor	PF>0.99/100V ac(at full load)	
	THD	230Vac@THD <10% (at full load)	
	Efficiency(typ.)	91%	88%
	Standby Power	0.4W	
	Inrush Current(typ.)	cold start4.5A@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	280×37×27mm(L×W×H)	
	Packing	285×47×33mm(L×W×H)	
	Weight(G.W.)	560g±10g	

Dimensions :



Product Label:

252 mm		35 mm	
<p style="text-align: center;">INPUT输入</p> <ul style="list-style-type: none"> <li>● ACN(BLUE藍)</li> <li>● ACL(BROWN棕)</li> <li>● FG(GREEN/YELLOW綠/黃)</li> </ul> <p style="text-align: center; font-size: small;">MADE IN CHINA</p>	<p><b>Model:PE-IL100DV24</b></p> <p>Input:100-250Vac 50/60Hz 1.2A                  Output:24V <math>\text{---}</math>                  P rated:max100W                  I rated:4.17A                  PF:&gt;0.95 ta:45°C tc:85°C                  Used for LED module only</p>	<p style="text-align: center;">Dimming LED Driver Constant Voltage LED控制装置</p> <div style="display: flex; justify-content: space-around; align-items: center;"> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;"> </div>	<p style="text-align: center;">OUTPUT输出</p> <ul style="list-style-type: none"> <li>● V+(RED紅)</li> <li>● V-(BLACK黑)</li> <li>● DA1(WHITE白)</li> <li>● DA2(BLUE藍)</li> </ul>

## Dimming curve



## The use of guidance:

Unless otherwise specified, all specifications and parameters are measured under the input of 230VAC and the rated load of 25 °C ambient temperature.

Wire according to the product identification, and pay attention to the positive and negative poles and the direction of input and output.

matters needing attention:

Note 1: please check whether the input and output terminals are correct after power on;

Note 2: please connect the load at the DC output first, confirm it is correct, and then turn on the power supply; In the constant voltage mode, if the open circuit is powered on, please turn off the power supply and connect the LED after the electric energy stored at the output end is released;

Note 3: this power driver is used for LED lamps. The input voltage range of the product is AC 100-250V, which is used within the specified output voltage and current range,

When the ambient temperature is - 20 to + 45 °C, and the surface cannot be covered with thermal insulation cotton and other items that block the heat dissipation of the product, the product enjoys a five-year free warranty under the environment that meets the service conditions of the product.

1. If the power supply does not light up after the electrical connection of the device for the first time, please cut off the AC input terminal and check:

- 1). Check whether the DC output terminal has poor contact.
- 2). Whether the positive and negative poles of DC output terminal are connected reversely.
- 3). Check whether the AC input terminal has poor contact, eliminate the fault and then conduct power on test.

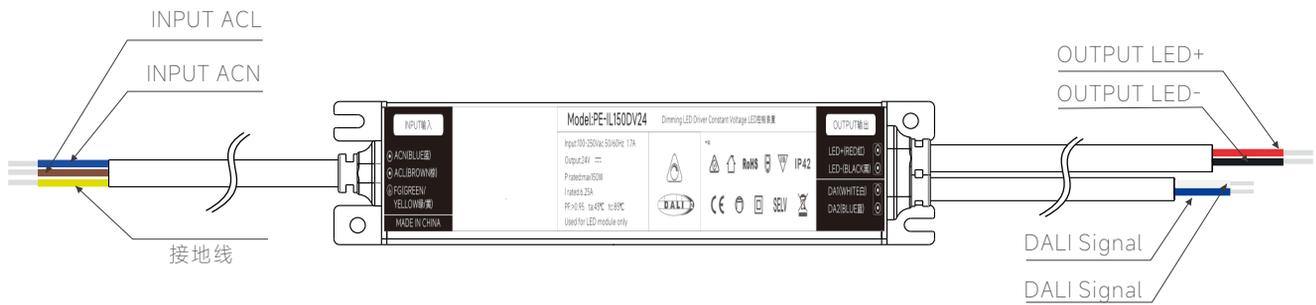
4). Connect the signal to read whether the data is set to shutdown after power on

2. After the device is electrically connected, the LED light is on, but the LED light flashes. Please cut off the AC input power supply and check the DC output:

1). Whether the design parameters of power supply are consistent with the actual use parameters of LED lamps.

2). In case of other questions or problems during the use of the product, please contact our company in time to communicate and feed back bad information. Our company will actively assist your company to solve the problems.

Connection:

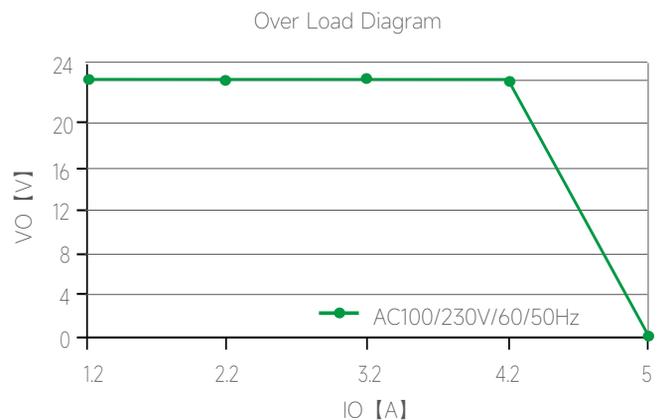
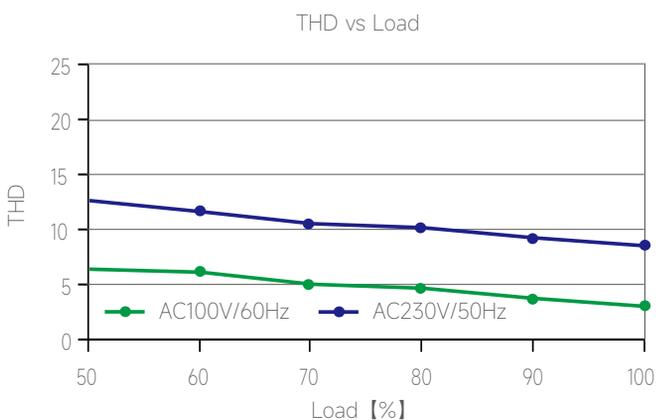
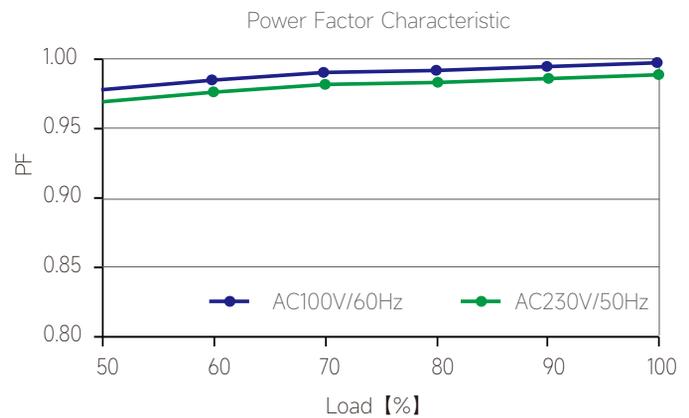
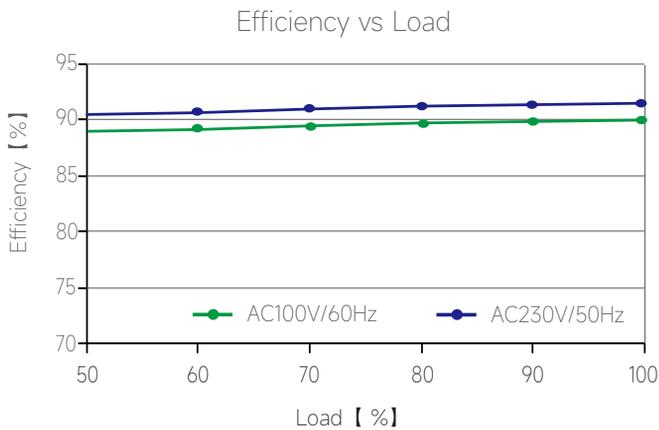


Note: the signal line interface cannot be connected to high voltage, otherwise the power supply will be damaged

Wiring:

Input wire: wire gauge 3-core wire 1 square, length 185mm, wire stripping 6-7mm (TIN)  
 Output wire: wire gauge 2-core wire 1 square, length 185mm, wire stripping 6-7mm (TIN)  
 Signal grounding: wire gauge 2-core wire 0.75m<sup>2</sup>, wire stripping 6-7mm (TIN)  
 External signal wire: 1.5 square copper core shielded wire, with length less than 300 meters

Relationship Diagrams:



## The abnormal conditions and the corresponding treatment methods:

Digital addressable lighting interface (DALI)

Dali slave unit sends data only when the host requests data, that is, it adopts the mode of command response.

In the same Dali network, there are at most 64 slave units, and each slave unit has an independent short address.

You can also assign a slave unit to a group. Up to 16 groups can exist at the same time, and a slave unit can belong to different groups.

Each unit can set 16 scenes.

Main features of Dali protocol

- 1). Asynchronous serial communication
- 2). 1200 baud with Manchester encoding
- 3). Two wire differential signal
- 4). When the differential voltage is greater than 9.5v, it is high level
- 5). When the differential voltage is less than 6.5V, it is low level
- 6). The communication process is controlled by the host unit
- 7). A Dali bus can connect 64 slaves
- 8). Each slave can be individually addressed

Dali electrical characteristics

In idle state, Dali bus is high level, and the slave unit controls the bus

- 1). When outputting high level, do not interfere with the signal of the host
- 2). When the output is low, the Dali bus can be directly short circuited to each other
- 3). The maximum current of Dali bus is 250mA
- 4). Two way communication cannot be carried out at the same time
- 5). The maximum length of data transmission line is 300m, or the voltage drop cannot exceed 2V

## Statement:

The pictures and specifications are for reference, subject to the real object.  
If there is any change in the specifications, it will be notified separately.