



- **Features:**

- ✓ Open-frame, height:30.5mm
- ✓ Input voltage: 90~264VAC
- ✓ Working temp-20~+60°C (refer to output derating curve)
- ✓ Fan-less, cold by air
- ✓ Protection:Short circuit/Overload/Over voltage
- ✓ 100% aging test
- ✓ High-efficiency,high reliability
- ✓ 2 years warranty

- **Applications:** HD LED Display、Transparent LED Display、Glass LED Display etc

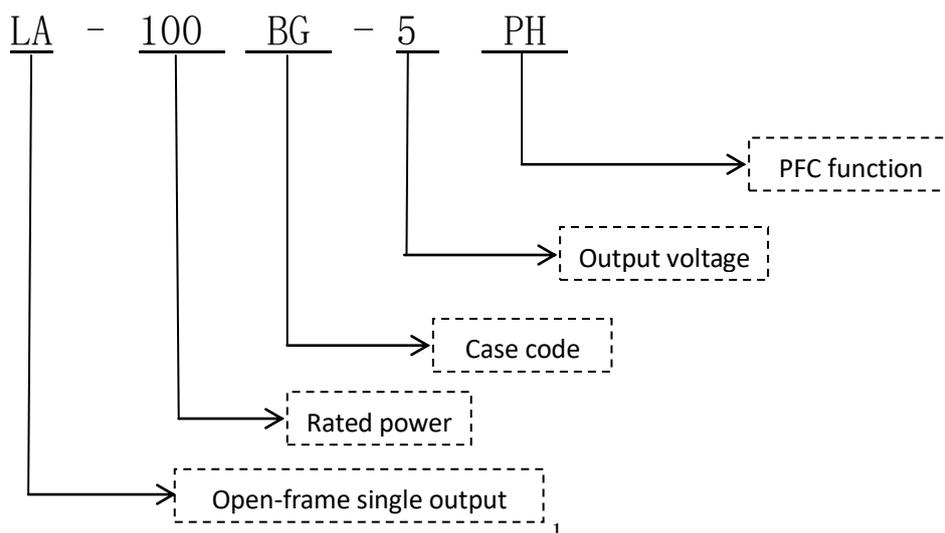
- **Reference standard**

EN55024\EN61000-4-2, 3, 4, 5, 6, 8, 11\GB17625.1\EN61000-3-2, -3\EN55022\GB4943\UL1012

- **Product description**

LA-100BG-PHseries products is a 100W fan free open-frame LED display power supply, with input voltage range of 90-264VAC, output voltage of 3.8V, 4. V, 4.3v, 4.5V, 4.6V, 5V, etc., which can be applied to LED display fields such as LED display screen, LED indicator light, LED TV wall, etc. This series of products are ultra-thin design, with a height of only 30.5mm, which can meet the requirements of various box sizes. Super high efficiency and good heat dissipation ensure the long-term stable work of this series of products.

- **Named**

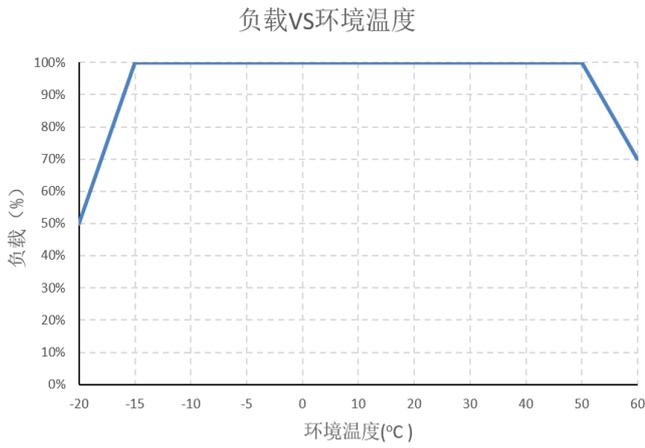


## ● General Specifications

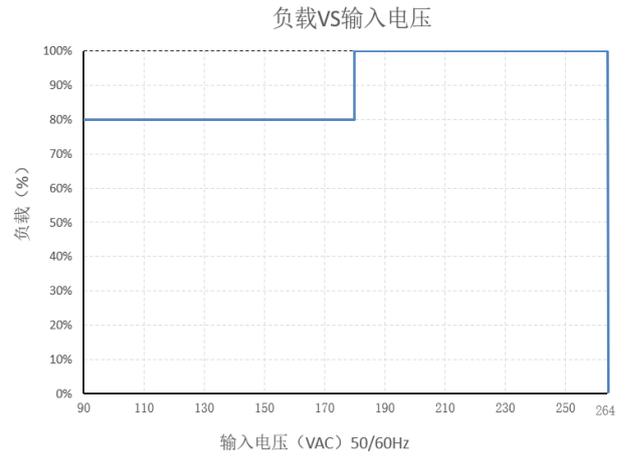
Model		LA-100BG-3. 8PH	LA-100BG-4 PH	LA-100BG-4. 3PH	LA-100BG-4 .5PH	LA-100BG-4.6P H	LA-100BG-5P H	
Input	Input voltage	90~264VAC						
	Input current	230VAC/0.5A						
	Efficiency	≥87%	≥87%	≥88%	≥89%	≥89%	≥90%	
	Frequency range	47~63HZ						
	Leakage current	<3.5mA/240VAC						
	Inrush current	Cold start 40A/230VAC						
	PFC	PF≥0.9						
Output	DC voltage	3.8V	4V	4.3V	4.5V	4.6V	5V	
	Rated current	20A	20A	20A	20A	20A	20A	
	Rated power	76W	80W	86W	90W	92W	100W	
	Voltage ADJ. range	/	/	/	/	/	/	
	Ripple & Noise	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	
	Setup, rise hold up time	2000ms, 50ms/ (230VAC) full load 20ms/230VAC full load						
	Line regulation	±0.5%		±0.5%	±0.5%		±0.5%	
	Load regulation	±3.0%		±3.0%	±3.0%		±3.0%	
	Voltage tolerance	±3.0%		±3.0%	±3.0%		±3.0%	
	EMC	EMS	Compliance to:EN55024 ;EN61000-4-2,3,4,5,6,8,11					
		Harmonic current	Compliance to:GB17625.1;EN61000-3-2,-3 Limited					
EMI		Compliance to:EN55022, Class A						
Safety	Safety standard	Compliance to:GB4943/UL1012						
	Withstand voltage	I/P-O/P:3.0KVac/10mA; I/P-CASE:1.5KVac/10mA; O/P-CASE:0.5KVAC/10mA 1min for each test						
	Isolation resistance	I/P-O/P:100M ohms; I/P-Case:100M ohms; O/P-Case:100M ohms						
Protection	Over voltage	110~150% limited rage						
	Over load	110~150% rated Hiccup mode, auto-recovery						
	Over temperature	/						
	Short circuit	Hiccup mode, auto-recovery						
Environment	Working Temp&humidity	-20~60℃ 20%~95%RH non-condensing (Refer to Derating Curve)						
	Storage Temp&humidity	-40℃~85℃; 10%~95%RH non-condensing						
	Vibration	10~500Hz, 2G, 10min/1 cycle, 60min. each along X, Y, Z axes						
	Impact	20G, last 11mS, 3 impacts along X, y and Z axes						
	Altitude	the ambient temperature derating of 0.6 ℃/100m for operating altitude higher than 2000m						
Reliability	MTBF	Under 25℃:250000Hrs, MIL-217 Method						
Others	Size	138.5*134.5*30.5 mm (L*W*H)						
	Packing	0.095Kg/pc, 50pc/ctn, 6KG/ctn						
	Cold mode	<input checked="" type="checkbox"/> free air convection <input type="checkbox"/> with fan						
	More options	<input type="checkbox"/> PCB double side conformal coating <input type="checkbox"/> Terminal with cover <input type="checkbox"/> low temp start (-40℃) <input type="checkbox"/> Other						

<b>Note</b>	<ul style="list-style-type: none"><li>*In order to extend the service life, it is recommended to leave 30% more allowance when loading. For example, if the equipment needs 100W power, please choose the power supply over 130W.</li><li>*Ripple&amp;noise are measured at 20MHz of bandwidth by using a 12' ' twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li><li>*All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li><li>*the auxiliary heat dissipation of aluminum plate with an area of 400 * 400 * 3mm must be used when full load working.</li><li>*The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. All our EMC tests are carried out by mounting samples on metal plates.</li></ul>
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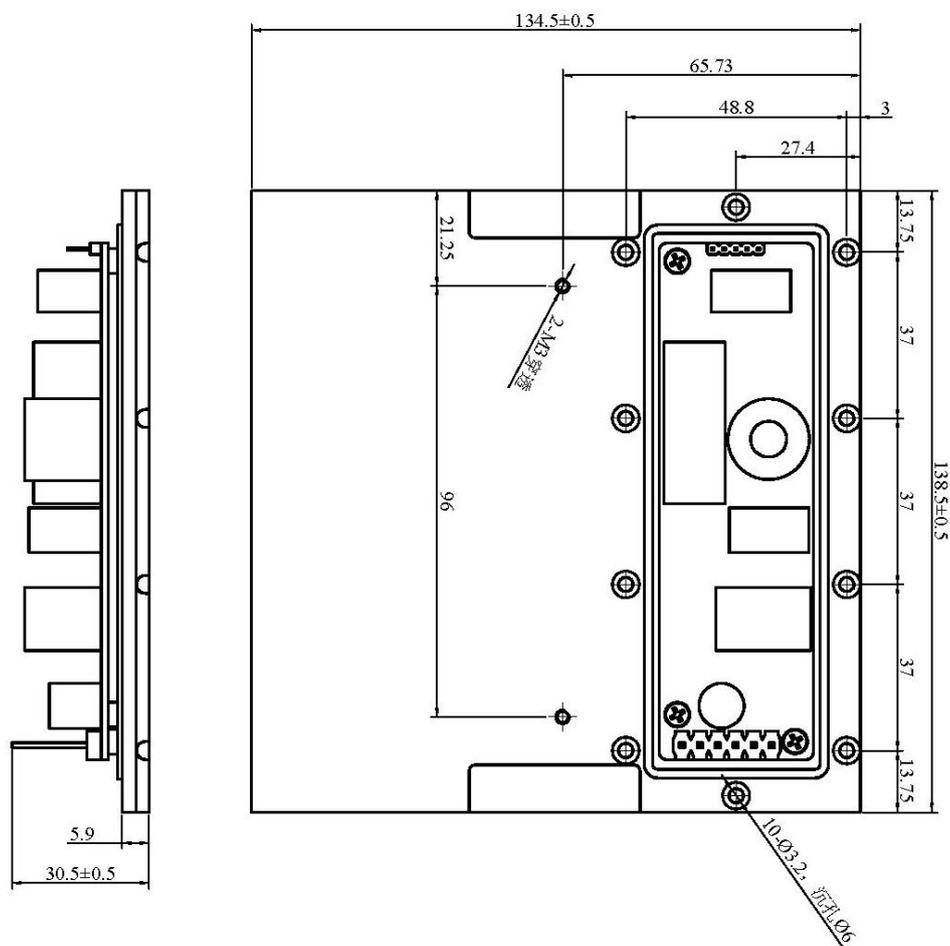
● Load and temperature curve



● Static characteristic curve



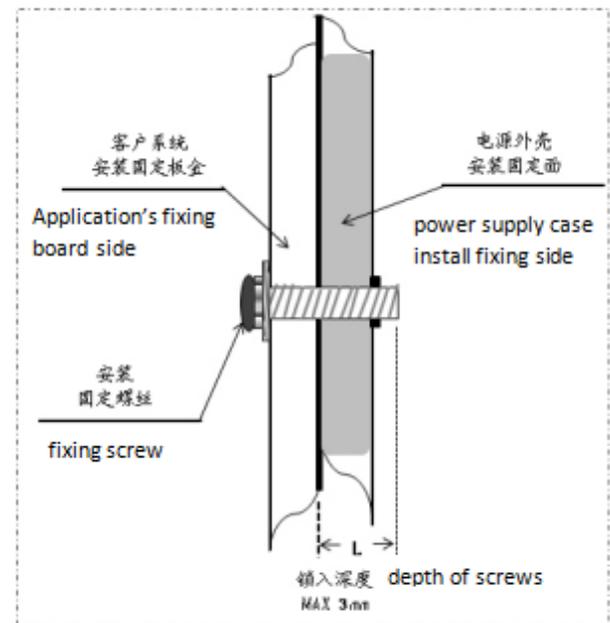
● Mechanical dimension



## ● Install Installation

### Warning

- Use mounting screws by M3\*6mm,
- Max depth of screws into housing is 3mm,
- Right picture with more details.



## ● Use instructions:

1. please follow the installation instructions when use the power supply.
2. Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment.
3. Before power on, please use a multimeter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on.
4. Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.
5. In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#).
6. If the power supply fails, please do not repair it without permission. Please contact our customer service department as soon as possible, customer service line: 86-519-85215050.

## ● Transport、storage:

### 1、Transport:

The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof, loaded and unloaded gently.

### 2、Storage:

When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.