

PRODUCT SPECIFICAT

Product Name: LED Gas station light

Product Specification:

Item Code	Features	
HB-100W-G		
HB-150W-G	Option: Philips SMD3030+ Mean Well	Driver
HB-200W-G		











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- Product features ,characteristics and scope of application
 - J) Features:

Patented product, easy and quick installation. By adopting ADC12 eco-friendly die-cast aluminum . The product is much more sturdy and durable . It has excellent heat dissipation which effectively prolongs the product's lifespan.

- Lighting structure features
- 1.We adopt PC lens with different beam angles to design different optical distribution solutions, which available from 60°, to 90° and 70°+140°.
- 2.LED driver is fixed on the back of heat sink, it looks firm and exoteric, which show the texture of product easily
- 3.Each individual module is connected independent, easy to divide, combine and expand. it has strong sense of scientific and technological.
- 4. This heat sink is made of AL6063 stretching aluminum.heat is dissipating under the best ratio of thickness&height of cooling fin conditions. During ambient temp as 25°Cand the maximum led chip junction's temperature is 60°C, The heat will be conducted by fins evenly and automatically when the led chip junction's temperature ups to 40°C.heat sink surface is anodized to prevent rust and corrode.
- 5. Allcableswithrubbertubes, coppercore. excellent electrical properties. there are waterproof connectors between cables to converting for outdoor user. on the one hand is to present elegant appearance, on the other hand is to make it more durable.
- 6.Installation Type:fixed. All material's performance should be accorded with The international standard 's relevant stipulations.



2). Application

Ideal for stadiums, gas station, squares, road, parking lots, building exterior wall, etc.

Usage scenarios and project cases:



□ Product parameter's

Option:

|--|

	Mean Well Driver			Phil	psSMD3030
Watts	Qty	Model Number	Parameter	Qty*pcs	Model number
HB-100W	1PCS	ELG-100-36A		48PCS*2	
HB-150W	1PCS	ELG-150-36A	The specific parameters are subject to the attachments	48PCS*3	
HB-200W	1PCS	ELG-200-36A		48PCS*4	



Taiwan MeanWell Driver is well-known in the led driver industry of world ,It has high product performance , the features of

ELG series as following:

Full range of universal voltage input AC100-305V					
Constant volta	Constant voltage +Constant current				
Surge protection	on 6KV(IEC 61	000-4-5)			
	excess	95~108%			
	current	Constant current limit,Automatic recovery after remove abnormal load			
		Automatic recovery after remove abnormal load			
		Off the out put voltage,restart it for recovery			
devices	voltage				
	excess	Off the output voltage, restart it for recovery			
	temperature				

Option:Parameters

	Voltage	AC100~305V 142-431VDC		
	Alternating	1.04/115/40[[1.24/220/4001 04/275/400		
	Current	1.8A/115VAC[[1.2A/230VAC 1.0A/277VAC		
Input	Frequency	47~63Hz		
	PowerFactor	PF≧0.97/115VAC, PF≧0.95/230VAC, PF≧0.92/277VAC		
	Totalhamornical	THD<20% (@load≧50%/115VC, 230VAC;		
	distortion	@load≧75%/277VAC)		
	compression			
	resistance	O/P-FG:1.5KVAC		
	SurgeImmunity	Linetoground:6KV, Linetoline: 4KVI/P-O/P,I/P-FG,O/P-FG		
Electrical	LeakageCurrent	277VAC, <2.5mA/277VAC		
Performance	Insulation	ACL+N, G, $\geq 100 \text{m}\Omega/500 \text{V}$,		
	Resistance	I/P-FG,O/P-FG: ≥100MOhms/500VDC/25°C/70%RH		
	GroundResistance	≤75mΩ		
		RA2700-6500K: 120-130 lm/W,		
	Luminous flux	Red light 620-625nm: 40-50 lm/W,		
	Lummous mux	Green light515-525nm: 80-90 lm/W		
		Blu-ray460-470nm: 18-25 lm/W		
optical	Color rendering			
parameters	indexRA	2700K-6500K: ≥70 ≥80		
parameters	BeamAngle	60°90°70°+140°		
	Colortemperature	5500-6500K, 4000-5000K, 2700-3500K		
	Wavelength	Redlight620-625nm, Greenlight515-525nm, Blu-ray460-470nm,		



三、Product safety and performance

1、Cable

Rubber cable : DC copper core is 0.75mm2,AC copper core is 1 .0mm2. The insulation resistance of core can be as high as $50M\Omega$ KM when the cable working at temperature of 20°C. with good flexibility, fire-resistant, cold-resistant, heat-resistant

and UV-resistant.able to bear large external mechanical forces.

Wiring regulations

Brownwire Bluewire	wire	Green and Yellow
AC170-250V (L)	AC170-250V (N)	(G)

2、PCB board

PCB thinkness 1.5MM , thermal conductivity:2.0 W/(mK).clearance of creepage distance is 5MM. insulation voltage;3000V

3、Thermal Silicone Grease

Famous brand: Henkel loctite . Model number: TG100 thermal conductivity: 3.4 W/(mK) . It has good resistance to weather and chemical, also high insulation, without solidification, no corrosion to substates. be sides it can be used in temperature between - $40^{\circ}\text{C} \sim 150^{\circ}\text{C}$ for long term .

Test Item	Test Condition:	Qualification Evaluation:
Cable tension		
Heating test	The light is applied to be pressured one hour with 20N by a 5mm steel ball and soak in cold water 10s	Diameter of indentation ≤2mm
	when It is horizontal;	
Hanging Strength	Putting permanent load of fourfold light's weight on the loading direction of lamp for 1hour.	No deformation
Endurance Test	Ambient temperature: (35 ± 2) °C, Test time: 240h, continuous cycle 10 times, each cycle is 24h.	light cannot be deformed ,cracked and scorched.It must be safe ,the marking should be clear
Temp erature Test	Ambienttemperature:25°C±1°C Itshouldbe measured when the ratio of temperature changing less than or equal to 1°C/h. Testing voltage is 1.06U (U=rate voltage);	The temperature of each test point meets the relevant requirements. For details, see the lab report or test report.
Vibration Test	10~500HZ,5G12 Minute/Cycle,Each axis 72minutes, X,Y,Z	no parts are loose or undeformed



	Sand&Dusttest IPinitialcharacteristicdigitalis (6)			
	1.50-75µm talc powder dosage:2.1kg turn on the light for 30minutes before test . then put it into testing box for 3hours under floating dust state after finished blowing dust for 3 minutes 。	No dust no sediment as qualified		
	Sand&Dust test (IP The second characteristic digital is 5)			
IP65	directions by means of a hose having a nozzle .the nozzle shall be held 2.5-3m away the sample . the water pressure at			
	the nozzle shall be adjusted to achieve a water delivery rate of 12.5L/min.spraying time 1minute per square at least for 10minutes.all parts should be tested which requests to be sprayed.	No water no hydrops as qualified		
	65	1.50-75µm talc powder dosage:2.1kg turn on the light for 30minutes before test . then put it into testing box for 3hours under floating dust state after finished blowing dust for 3 minutes . Sand&Dust test (IP The second characteristic digital is 5) light is subjected to a water jet of 6.3m from all practicable directions by means of a hose having a nozzle .the nozzle shall be held 2.5-3m away the sample . the water pressure at the nozzle shall be adjusted to achieve a water delivery rate of 12.5L/min.spraying time 1minute per square at least for 10minutes.all parts should be tested which requests to be		

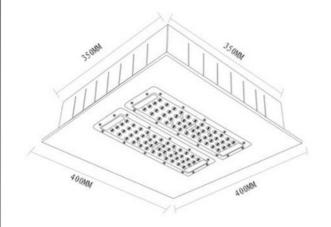
Test Item	Test Condition:	Qualification Evaluation:
Ground Resistance	10A,	≤75mΩ
Hi-potTest	AC line L plus N, and ground line G	No ARC and
TII-pot rest	I/P-O/P,I/P-FG,O/P-FG,Through 1500 high pressure,	phenomenon of leakage of electricity
Leakage Current	under AC 277V normal condition lighting	≤2.5mA/277VAC
Insulation Resistance	AC line L+N,Between G and the ground,By the 500V I/P-O/P,I/P-FG,O/P-FG:	100M Ohms/500VDC/25°C/70%RH

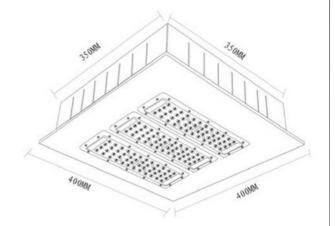
I/P-O/P,I/P-FG,O/P-FG:100MOhms/500VDC/25°C /70%RH

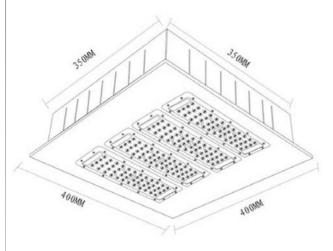
OperatingTemperatureRange	
(Ambient temp25°C,	Tcase=-40~+90°C
Humidity30%RH)	
Max. rated temperature of housing	
(Ambient temp25°C,	Tcase=+70°C
Humidity30%RH)	
Working Humidity	20~95%RH, non-condensing
Storage Temperature and Humidity	-40∼+90℃,10∼95%RH



四、Product structure drawing and specification







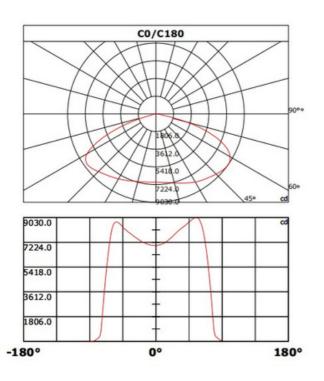
#	Product Name	Watts (W)	Item Code	Body Size (mm)	Carton Size (mm) & Weight	Remark
1	LED HIGHBAY	100W	HB-100W	400*400*130	48*48*17 (5KG) 1 PCS/CTN	2 Module
2	LED HIGHBAY	150W	HB-150W	400*400*130	48*48*17 (7.9KG) 1PCS/CTN	3 Module
3	LED HIGHBAY	200W	HB-200W	400*400*130	48*48*17 (8.4KG) 1PCS/CTN	4 Module

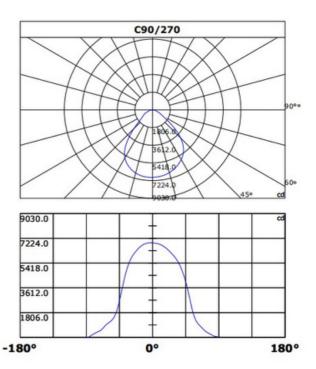


5. Light distribution curve and illumination diagram

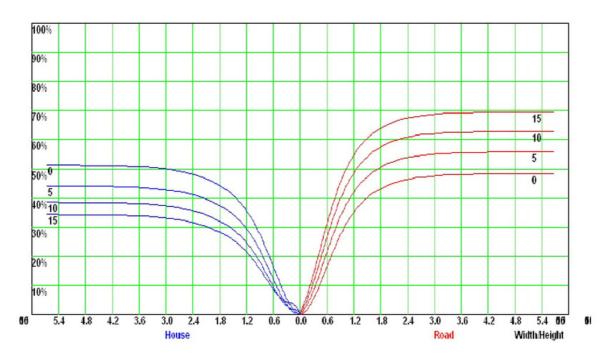
PC lens with 60°, 90° and 70°+140°.

Light Distribution Curve [Unit: cd]





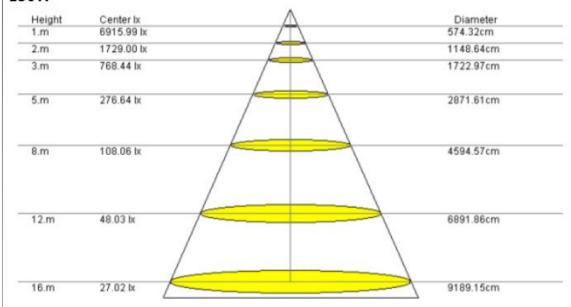
Coefficient Utilization Curve





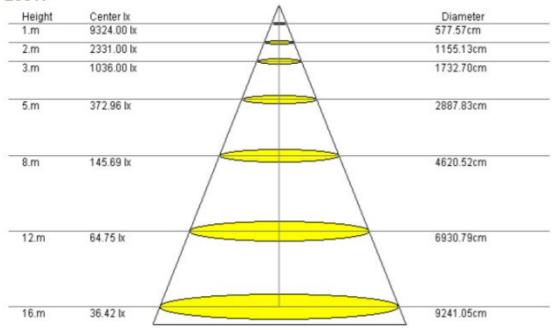
Lux-Distance Curve

150W



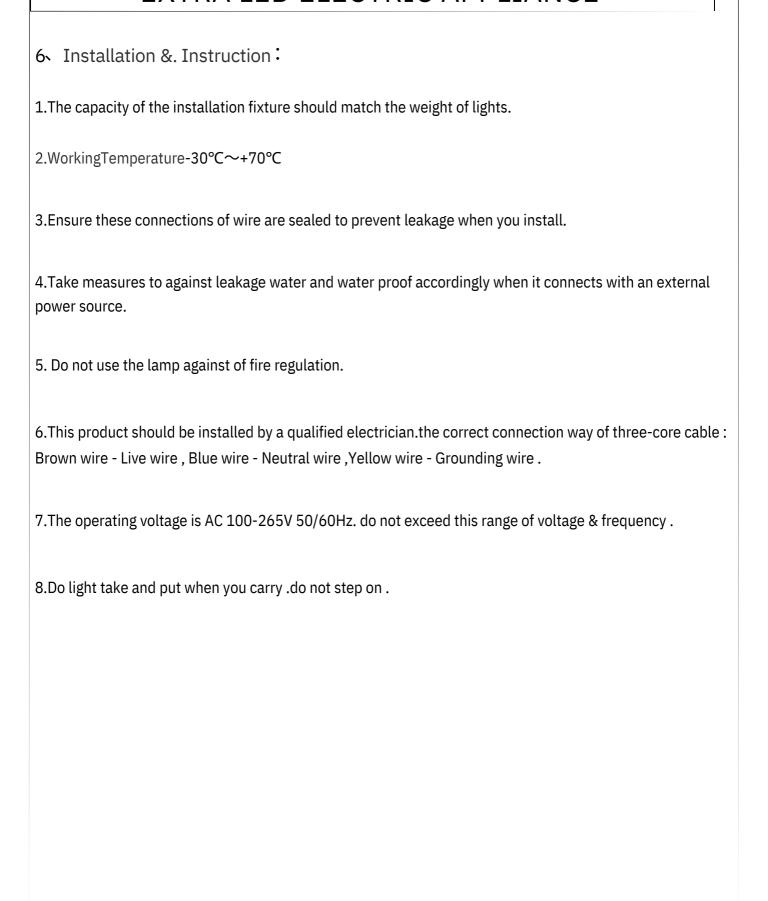
Beam Angle:141.60°(50%Imax)

200W



Beam Angle:141.80°(50%Imax)

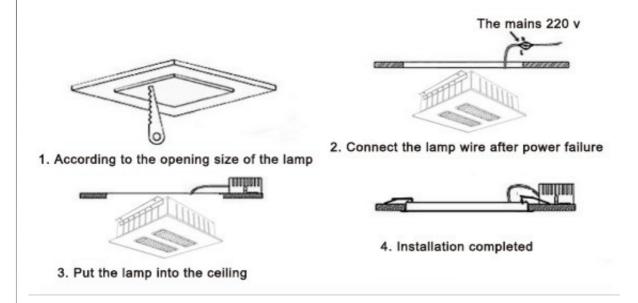






Installation Instruction&figures

1. As figure below . two holes (dia12mm/depth60-80mm) had been punched on the symmetrical position of tunnel wall according to the cut-out size from spec.



2.Top-absorbing installation, embedded installation, simple maintenance, easy operation, low cost.

3.The lamp wiring should be followed below wiring diagrams of power input to connect with AC220V

Wiring diagrams of power input

Brown wire	Blue wire	Green and Yellow wire
AC170-250V (L)	AC170-250V (N)	AC (G)



7. Packing Information



8. Warranty, After-sales service, other requirements

All our products are guaranteed for 5 years, It's based on store ,installation, use and maintenance properly.we will offer solutions such as repairs, exchange spare parts ,new replacement within guarantee period. The repair materials, accessories and labor cost are charged if it's expired.

: Note

- 1. Make sure the power is off before you maintain
- 2.Cleaning PC lens regular to keep high light transmission.
- 3. Cleaning the dust which covered housing&heat sink to keep high heat dissipation performance.
- 4.Do not clean it with any water or corrosive solution.it'd better with a dry cloth.