

TOP SOLAR INDUSTRIAL LIMITED



Product Advantages:

Top Solar Industrial Ltd (JIANGSU YINGBIN LIGHTING TECHNOLOGY CO.,LTD) is a high-tech enterprise. It established on 2002 with RMB 10 million registered capital. It is located in Jinan, China, occupying 30,000 m².

Top Solar Industrial Ltd is the manufacture and expert in solar lighting products, including solar street light, solar roadway lights, solar pathway lights, solar garden light, solar parking lights, solar lawn lights, led lights, solar systems and solar lighting fixtures.

Top Solar Industrial Ltd Certifications:

Our facilities are ISO 9001:2000 certified, and our products comply with CE, FCC and Rohs criteria.

In order to ensure that you receive the most compact, reliable and efficient solar system, we choice the best-breed LED source, battery, panel and controller.

Company Picture Showing



Company Files

Vendor Name: TOP SOLAR INDUSTRIAL LIMITED		DUNS Number:	
Address: NO.127-8 SUFA ROAD, GUOJI TOWN, YANGZHOU, CHINA		Payment term:	
Website	www.topsolarlighting.com	Tel:	0514 84240999
Fax:	0514 84246457		
Contact Person	Position	Location	Telephone
Eric Cao	trade manager	yangzhou/jinan	15275102622
Email address		emacric@gmail.com	

Vendor Profile			
Supplier Type Manufacturer ☐ Manufacturer Partner ☐ Trading Company ☐			
Vendor ownership Foreign owned ☐ Domestic ☐ State owned ☐ Established in: 2005			
If foreign owned, Taiwan ☐ Hongkong ☐ or Others:			
Percentage of ownership %			
Factory Area (m ²): 30,000		No. of assembly lines: 120	
Total workers 150		No. of supervisors 10	
No. of QA/QC Personnel 4		No. of R&D engineers 10	
Annual Turnover USD 30,000,000		2007 2006	
ISO9000 ☐ ISO 9001-2000 ☐ ISO14000 ☐ SA8000 ☐			
Product Range & Sub-categories			
Product type	Monthly capacity	Product type	Monthly capacity
solar street light	5000	solar garden light	9000
led street lamp	30000	solar lawn light	15000
Major Markets & Customers			
Region/Country	Percentage	Major customers	
Latin American	30%		
Southeast Asia	50%		
Middle East	20%		

SOLAR PANEL WORKSHOP



TCT	
<i>Certificate of Compliance</i>	
CERTIFICATE NO.: TCT11108010003E-1	
Product	: Solar Street Light
Model	: JSB-LD-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01
Applicant	: Top Solar Industrial Limited
Address	: No. 2218, Block A, 1601, Hualong Road, Jinan City, Shandong Province
This is to certify that, on the basis of the tests undertaken as per Report No.: TCT11108010003ER-1, the submitted sample of the above item complies with:	
EN 55015:2006+A1:2007+A2:2009	
EN 61547:2009	
EN 61000-3-2: 2006+A1:2009	
EN 61000-3-3: 2008	
And fulfills testing requirement of the EMC directive 2004/108/EC.	
	
 Tomsin, Chief Engineer	Date of Issue: Aug.01, 2011
Shenzhen TCT Testing Technology Co., Ltd. Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT	
FCC-VERIFICATION	
TCT11108010003F-1	
This verification that the following designated product	
Solar Street Light	
Model No.: JSB-LD-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01	
(Product Identification)	
It is herewith confirmed and found to comply with the requirements set up by regulation for the evaluation of electromagnetic compatibility. This device complies with of the FCC rules; operation is subject to the following two conditions:	
(1) this device may not cause harmful interference and,	
(2) this device must accept any interference received,	
including interference that may cause undesired operation.	
This declaration is the responsibility of the manufacturer/importer	
Top Solar Industrial Limited	
No. 2218, Block A, 1501, Hualong Road, Jinan City,	
Shandong Province	
Identification of regulation/standards: FCC Part 18 Subpart B Class B, Measurement Procedure: ANSI C63.4:2003. It is only valid in connection with the test report number: TCT11108010003FR-1	
TEST LABORATORY	
This is the results of test that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the FCC-mark for EMI on the product complying with the inspection sample.	
FCC	Authorized Signer:  Tomsin Senior Manager
	Date: Aug.01, 2011
This verification is only valid for the equipment and configuration described in conjunction with the test data detailed above	
Shenzhen TCT Testing Technology Co., Ltd.	
Hotline: 400-6811-140 Tel: 86-755-27673338 Fax: 86-755-27673332 Http://www.tct-lab.com	

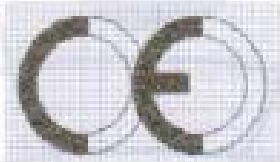
SOLAR STREET LIGHT CERTIFICATION ROHS

TCT	
<i>Certificate of Compliance</i>	
CERTIFICATE NO.: TCT11108010003R-1	
Product	: Solar Street Light
Model	: JSB-LD-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01
Applicant	: Top Solar Industrial Limited
Address	: No. 2218, Block A, 1501, Hualong Road, Jinan City, Shandong Province
This is to certify that, on the basis of the tests undertaken as per Report No.: TCT11108010003RR-1, the submitted sample of the above item complies with:	
EPA 3050B:1996, EN1122:2001, EPA 3052:1996, EPA 3060A, EPA 7196, EPA 3540C, EPA 8270C	
And fulfills testing requirement of the RoHS directive 2002/95/EC	
RoHS	
 Tomsin, China Engineer	Date of issue: Aug.01, 2011
Shenzhen TCT Testing Technology Co.,Ltd. Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT	
<i>Certificate of Compliance</i>	
CERTIFICATE NO.: TCT11108010003E-2	
Product	: Solar Garden Lights
Model	: JSB-TY-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01
Applicant	: Top Solar Industrial Limited
Address	: No. 2218, Block A, 1501, Hualong Road, Jinan City, Shandong Province
This is to certify that, on the basis of the tests undertaken as per Report No.: TCT11108010003ER-2, the submitted sample of the above item complies with:	
EN 55015:2006+A1:2007+A2:2009	
EN 61547:2009	
EN 61000-3-2: 2006+A1:2009	
EN 61000-3-3: 2008	
And fulfills testing requirement of the EMC directive 2004/108/EC.	
	
 Tomsin, Chief Engineer	Date of Issue: Aug.01, 2011
Shenzhen TCT Testing Technology Co.,Ltd.	
Hotline: 400-8611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT	
FCC-VERIFICATION	
TCT11108010003F-2	
This verification that the following designated product	
Solar Garden Lights	
Model No.: JSB-TY-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01	
(Product Identification)	
It is herewith confirmed and found to comply with the requirements set up by regulation for the evaluation of electromagnetic compatibility. This device complies with of the FCC rules; operation is subject to the following two conditions:	
(1) this device may not cause harmful interference and,	
(2) this device must accept any interference received,	
including interference that may cause undesired operation.	
This declaration is the responsibility of the manufacturer/importer	
Top Solar Industrial Limited	
No. 2218, Block A, 1601, Hualong Road, Jinan City,	
Shandong Province	
Identification of regulation/standards: FCC Part 18 Subpart B Class B, Measurement Procedure: ANSI C63.4:2003, It is only valid in connection with the test report number: TCT11108010003FR-2	
TEST LABORATORY	
This is the results of test that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the FCC-mark for EMI on the product complying with the inspection sample.	
FCC	
Authorized Signer: 	Tomsin/Senior Manager
Date: <u>Aug.01, 2011</u>	
This verification is only valid for the equipment and configuration described in conjunction with the test data detailed above	
Shenzhen TCT Testing Technology Co.,Ltd.	
Hotline: 400-8611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT	
<i>Certificate of Compliance</i>	
CERTIFICATE NO.: TCT11108010003R-2	
Product	: Solar Garden Lights
Model	: JSB-TY-01-101, JSB-KZQ12V-01, JSB-KZQ24V-01
Applicant	: Top Solar Industrial Limited
Address	: No. 2218, Block A, 1501, Hualong Road, Jinan City, Shandong Province
This is to certify that, on the basis of the tests undertaken as per Report No.: TCT11108010003RR-2, the submitted sample of the above item complies with:	
EPA 3050B:1996, EN1122:2001, EPA 3052:1996, EPA 3060A, EPA 7196, EPA 3540C, EPA 8270C	
And fulfils testing requirement of the RoHS directive 2002/95/EC.	
RoHS	
 Tomsin, Chief Engineer	Date of issue: Aug.01, 2011
Shenzhen TCT Testing Technology Co.,Ltd. Hotline: 400-8811-140 Tel: 86-755-27673338 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT	
<i>Certificate of Compliance</i>	
CERTIFICATE NO.: TCT11108010003E	
Product	: Solar Lawn Light
Model	: JSB-CP-01-101
Applicant	: Top Solar Industrial Limited
Address	: No. 2218, Block A, 1501, Hualong Road, Jinan City, Shandong Province
This is to certify that, on the basis of the tests undertaken as per Report No.: TCT11108010003ER, the submitted sample of the above item complies with:	
EN 55015:2006+A1:2007+A2:2009	
EN 61547:2009	
EN 61000-3-2: 2006+A1:2009	
EN 61000-3-3: 2006	
And fulfills testing requirement of the EMC directive 2004/108/EC.	
	
 Tomsin, Chief Engineer	Date of Issue: Aug.01, 2011
Shenzhen TCT Testing Technology Co., Ltd.	
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

SOLAR LAWN LIGHT CERTIFICATION FCC

TCT	
FCC-VERIFICATION	
TCT11108010003F	
This verification that the following designated product	
Solar Lawn Light	
Model No.: JSB-CP-01-101	
(Product Identification)	
It is herewith confirmed and round to comply with the requirements set up by regulation for the evaluation of electromagnetic compatibility. This device complies with of the FCC rules; operation is subject to the following two conditions.	
(1) this device may not cause harmful interference and,	
(2) this device must accept any interference received,	
including interference that may cause undesired operation.	
This declaration is the responsibility of the manufacturer/importer	
Top Solar Industrial Limited	
No. 2218, Block A, 1501, Hualong Road, Jinan City,	
Shandong Province	
Identification of regulation/standards: FCC Part 18 Subpart B Class B, Measurement Procedure: ANSI C63.4:2003. It is only valid in connection with the test report number: TCT11108010003FR	
TEST LABORATORY	
This is the results of test that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the FCC-mark for EMI on the product complying with the inspection sample.	
FCC	Authorized Signer:  Tomatsu/Scott, Manager
Date: Aug.01, 2011	
This verification is only valid for the equipment and configuration described in conjunction with the test data detailed above	
Shenzhen TCT Testing Technology Co.,Ltd.	
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 Http://www.tct-lab.com	

TCT

Certificate of Compliance

CERTIFICATE NO.: TCT11108010003R

Product : Solar Lawn Light
Model : JSB-CP-01-101
Applicant : Top Solar Industrial Limited
Address : No. 2218, Block A, 1501, Hualong Road, Jinan City,
Shandong Province

This is to certify that, on the basis of the tests undertaken as per Report No.:
TCT11108010003RR, the submitted sample of the above item complies with:

EPA 3050B:1996, EN1122:2001,
EPA 3052:1996, EPA 3060A,
EPA 7196, EPA 3540C, EPA 8270C

And fulfills testing requirement of the RoHS directive 2002/95/EC.

RoHS



Date of Issue: Aug.01, 2011

Shenzhen TCT Testing Technology Co., Ltd.

Hotline: 400-6811-140 Tel: 86-755-27673339 Fax: 86-755-27673332 [Http://www.tct-lab.com](http://www.tct-lab.com)



Certificate No.: C06120608R

COMPETENT BODY ACCREDITED TEST HOUSE

CERTIFICATE OF CONFORMITY

EU EMC-DIRECTIVE 2004/108/EEC -

This certifies that the following designated product

Solar Panel Or PV Module

MODELNO. DJM-20D DJM-25D DJM-30D DJM-35D DJM-40D DJM-45D DJM-60D
DJM-65D DJM-70D DJM-75D DJM-80D DJM-85D DJM-90D DJM-160D DJM-165D
DJM-170D DJM-175D DJM-180D

(Product identification)

Complies with the essential protection requirements of Council Directive 2004/108/EEC on the approximation of the laws of the Member states relating to electromagnetic compatibility.

This certificate is awarded following tests carried out on samples of the product referred to above.

Assessment of compliance of the product with the requirements relating to electromagnetic compatibility

Was based on the following:

EN 55022: 1998+A1:2000+A2:2003 EN 61000-3-2: 2000 + A1: 2001
EN 61000-3-3: 1995 + A1: 2001 EN 55024: 1998+A1:2001+A2:2003
IEC 61000-4-2:2001 IEC 61000-4-3: 2002+A1:2002 IEC 61000-4-4: 1995 + A1: 2000+A2:2001
IEC 61000-4-5:2001 IEC 61000-4-6:2003 IEC 61000-4-8: 2001 IEC 61000-4-11: 2001

(Identification of regulations/standards)

This certificate is issued for

Changzhou Nesl Solartech Co., Ltd.

Wujin High—Tech Industrial Zone, Changzhou, Jiangsu, P. R. China

(Name/Address)

THE CERTIFICATION IS VALID ONLY ACCORDANCE WITH THE TEST REPORT NO. C06120608-R
THE CONFIRMATION IS VALID ONLY IF THE PRODUCT IS MANUFACTURED IN ACCORDANCE WITH THE TESTREPORT

GS LVD E6-MARK FCC GSM UMTS CE-MARK SAR RADIO CB EMC DECT WLAN 3G Bluetooth R&TTE



*Euro-am Electrotechnical
Test Laboratory Co., Ltd
IF, NO.66, Zhongxiao East Rd.,
Taipei Hsien Taiwan ROC*

Angela
Angela Tang, Managing Director
Date: November 16, 2007

SOLAR PANEL CERTIFICATION TUV

ATE • CERTIFICATO • ZERTIFIKAT • CERTIFICADO • 証明書 • 証明 • 証明

INTERCERT

C E R T I F I C A T E

Annex of

Certificate No. 10-PPV-0001608/01-W01-TIC

THE PHOTOVOLTAIC MODULES WITH THE MODEL

DJ-280P (Tested type)

Cell Number	Cell Size	Power
72	6"	280

Types extended for similarity* without need of re-testing
(according to IEC61215 "Retesting guideline"):

Type	Cell Number	Cell Size	Power
DJ-170P*	54	6"	170
DJ-180P*	54	6"	180
DJ-190P*	54	6"	190
DJ-200PA*	54	6"	200
DJ-200PB*	60	6"	200
DJ-210P*	60	6"	210
DJ-220P*	60	6"	220
DJ-230P*	60	6"	230
DJ-240P*	72	6"	240
DJ-250P*	72	6"	250
DJ-260P*	72	6"	260
DJ-270P*	72	6"	270

Notes: (*) The manufacturer declares that these products are constructed using the same materials, components and processes as the tested type (DJ-280P). Technical data, materials and components description are into the indicated test reports. Any changes of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. The certification is performed on tested model as complete certification. This certificate is for type approval and based on voluntarily product test with Factory Inspection. (The Manufacturing Inspection was conducted by a TÜV INTERCERT appointed inspector on the basis of agreement with the certification body TÜV INTERCERT.)

**Deutscher
Accreditierungs
Rat
DAR
DAT-ZE-030/09-00**

**TÜV
INTERCERT**

**TÜV
INTERCERT
PD 419326**

SOLAR PANEL CERTIFICATION UL

Certificate of Compliance

Certificate Number: 240909-E315504 - A
Report Reference: E315504, 2009 Sept. 22
Issue Date: 2009 September 24

Page 1 of 1



**Underwriters
Laboratories**

Issued to: **Changzhou Nest Solartech Co Ltd**

5A, 8 Xihu Rd Wujin High-Tech Industrial Zone
Changzhou, Jiangsu 213164 China

*This is to certify that
representative samples of*

Photovoltaic Modules and Panels

Models: DJ-50P, DJ-60P, DJ-70P, DJ-80P, DJ-100P, DJ-110P, DJ-120P, DJ-
200P, DJ-210P, DJ-220P, DJ-230P, DJ-240P, DJ-250P, DJ-260P, DJ-270P, DJ-
280P.

*Have been investigated by Underwriters Laboratories in accordance with
the Standard(s) indicated on this Certificate.*

Standard(s) for Safety:

**UL 1703 - STANDARD FOR FLAT-PLATE PHOTOVOLTAIC MODULES
AND PANELS - Edition 3 - Revision Date 2008-04-08
ULC/ORD-C1703-1 1st Edition**

Additional Information:

NA

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes the UL in a circle symbol with "C" and "US" identifiers.

 the word "LISTED", a product number (may be alphanumeric) assigned by UL, and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

Issued by: *(Signature)*

Rene Han, SCSC

UL E315

Any information and documentation involving UL Mark services are provided solely at UL's discretion. Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.
The product is China's own product.

Reviewed by: *(Signature)*

Raymond Au

UL E315



质量管理体系认证证书

证书编号: 10412Q20632R05

兹证明

山东金世博光电工程有限公司

(地址: 山东省济南市历城区二环东路东方智景1号楼1单元(A座)1501室 邮编: 250100)

质量管理体系符合标准:

GB/T 19001-2008 / ISO 9001:2008 和 GB/T50430-2007

通过认证范围如下:

*** 城市及道路照明工程施工 (按资质范围) ***

涉及本证书的范围和 GB/T 19001-2008 / ISO 9001:2008 和 GB/T50430-2007 要求的适用性问题, 可通过向本机构咨询而得到进一步的澄清。证书在国家规定的行政许可、资质、强制性产品认证有效期内并正常接受年度审核的情况下有效。

发证日期: 2012年09月03日

有效期: 2012年09月03日至2015年09月03日

签发人:



外部认证
CNAS C104-Q



通 知 事 项
地址: 中国·山东省济南市历城区二环东路东方智景1号楼1单元(A座)1501室
电话: 0531-87766322 传真: 0531-87766323 网站: www.jintan.com.cn



环境管理体系认证证书

证书编号: 10412E16348R05

被认证

山东金世博光电工程有限公司

(地址: 山东省济南市历城区二环东路东方新景1号楼1单元(A座)1501室 邮编: 250000)

环境管理体系符合标准:

GB/T 24001-2004 idt ISO 14001:2004

通过认证范围如下:

- 位于山东省济南市历城区二环东路东方新景1号楼1单元(A座)1501室的山东金世博光电工程有限公司的城市及道路照明工程施工(按资质范围)及相关环境管理活动。

涉及本证书的范围和GB/T 24001-2004 idt ISO 14001:2004 要求的适用性问题, 可通过向本机构咨询而得到进一步的澄清。证书在国家规定的行政许可、资质、强制性产品认证有效期内非正常接受年度审核的情况下有效。

发证日期: 2012年09月03日

有效期: 2012年09月03日至2015年09月02日

签发人:



合格发证
CNAS C-1046



STREET LIGHT PORJECT



STREET LIGHT PROJECT



SOLAR STREET LIGHT MODELS

Solar street light



SOLAR STREET LIGHT



SOLAR WIND STREET LIGHTS

Solar wind street light

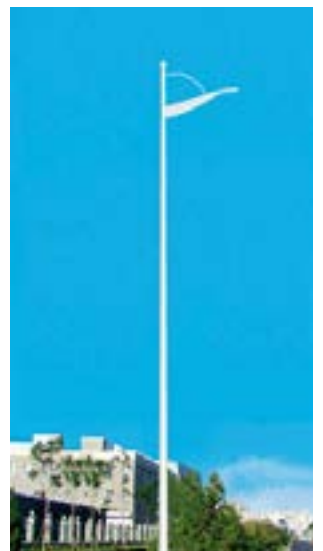


SOLAR GARDEN LIGHTS

Solar garden light



Solar street light pole





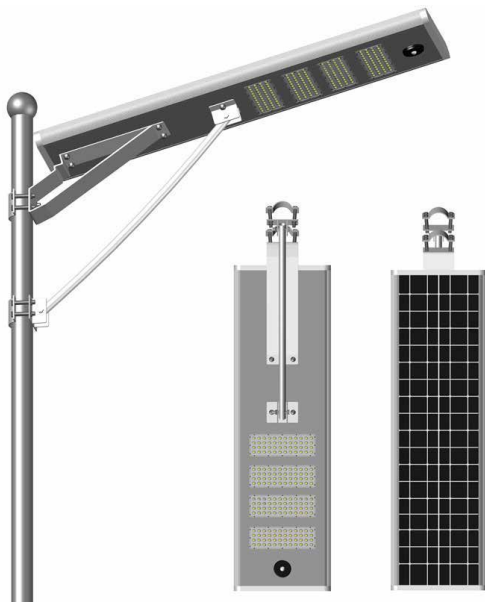
Solar street light pole



Solar street light pole



Solar Street Light-LK Series



APPLICATIONS

- Road lighting
- Industrial parks roads
- Highways
- Urban street
- Countryside road
- Sidewalk
- Car Parks



PRODUCT FEATURES

- Imported Mono solar panels. The panel chip is closely covered, the light charging is faster.
- MPPT controller, Human body induction+light control can be set up as per actual need. Auto on/off.
- Lithium LifePO4 battery 12.8V, large capacity, full charge only need 6 hours bright sunshine. can support 3-7 rainy days. Overcharge protection, over discharge protection, temperature control protection.

STRUCTURE

- The radiator is 6063 aluminum, which adopts thick anti-corrosion paint treatment.
- No additional wiring is required, saving costs; multiple mounting brackets can be tube mounted, arm mounted, etc.
- Direct luminous design, high light transmission PC protective cover, light transmittance of more than 90%, high light efficiency.
- PWM/MPPT charging, effective sunshine for 6 hours, lasting 3-7 rainy days.
- Genuine imported Philips chip lamp beads, high light efficiency, low light attenuation, with LM80 test report, Much longer lifespan.
- 3 years warranty guarantee, lifetime cost and price maintenance.
- High thermal conductivity aluminum substrate and radiator, low temperature rise, good heat dissipation of the whole lamp, and more guaranteed life.

PHOTOELECTRIC

Model Number	Power	LED	Solar Panel	CCT	Efficacy	Temperature
GH-LK-15W	15W	30pcs SMD3030	18V/25W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-20W	20W	30pcs SMD3030	18V/35W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-30W	30W	60pcs SMD3030	18V/50W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-40W	40W	90pcs SMD3030	18V/60W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-50W	50W	90pcs SMD3030	18V/70W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-60W	60W	120pcs SMD3030	18V/90W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-80W	80W	150pcs SMD3030	18V/110W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃
GH-LK-100W	100W	150pcs SMD3030	18V/120W Mono-crystalline	3000-6000K	170LM/W	-30℃±55℃

Smart Sensor



Mono panel



Lithium LifePO4 battery



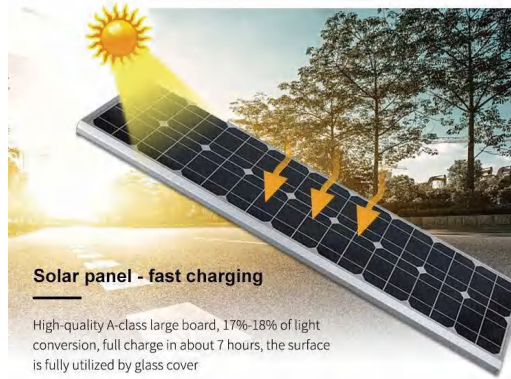
MPPT Controller



WATERPROOF RATING IP65

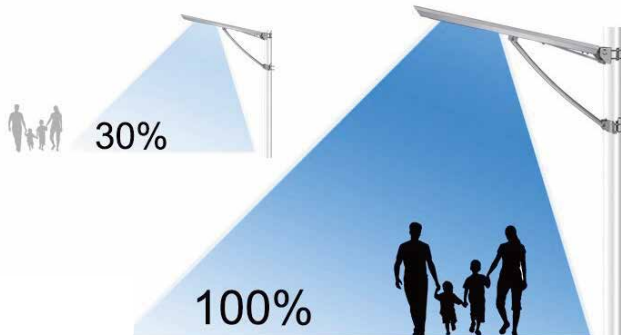
rain and lightning protection function

Outdoor rainy days can also be illuminated.

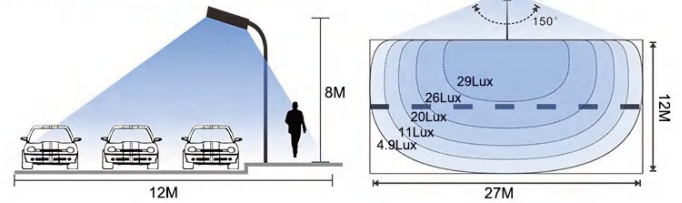


The sensing distance is about 8-10 meters

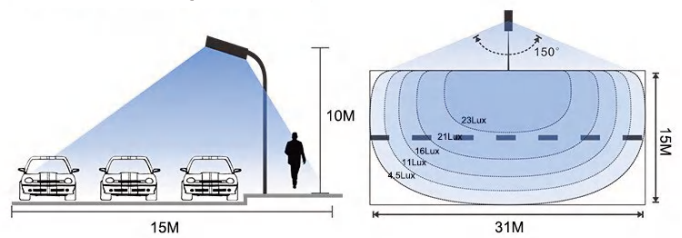
The luminaire is fully illuminated in the sensing range, otherwise it is 30% bright



LK-60W Solar Street Light Area



LK-80W Solar Street Light Area



Street Light-SLL Series



APPLICATIONS

- Road lighting
- Industrial parks roads
- Highways
- Urban street
- Countryside road
- Sidewalk
- Car Parks



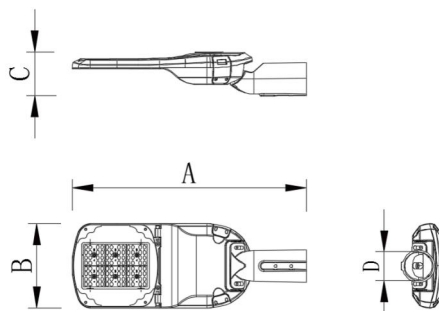
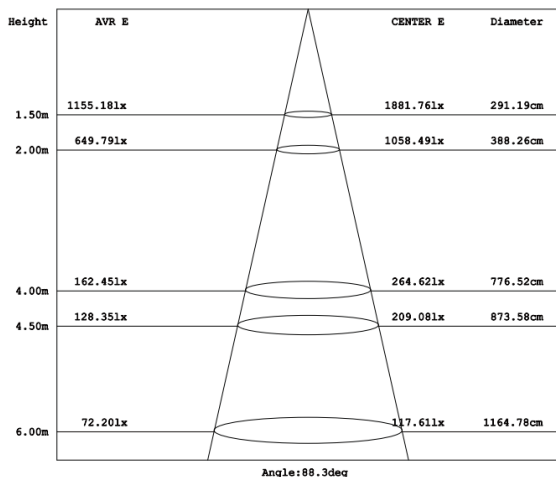
PRODUCT FEATURES

- Tempered glass, weather proof, more reliable.
- UV-proof silica gel, No leakage after long time operations.
- PANLITE 1250Z professional optical lens, many beam angle solutions for different lighting distribution options.
- 3030 SMD. Low energy consumption. high lumen, SDCM<3, high uniformity on road surface.
- High thermal conductivity aluminum PCB. Ensures high lumen and low lumen loss.
- Streamline body, the dust is hard to attach. Self-clean. Small cross section, strong wind resistant design.
- Inner grille structure, faster heat sinking.
- Pole angle adjustable. Can be installed horizontally or vertically.
- Well-known brand led driver for project use. No maintenance concerns.



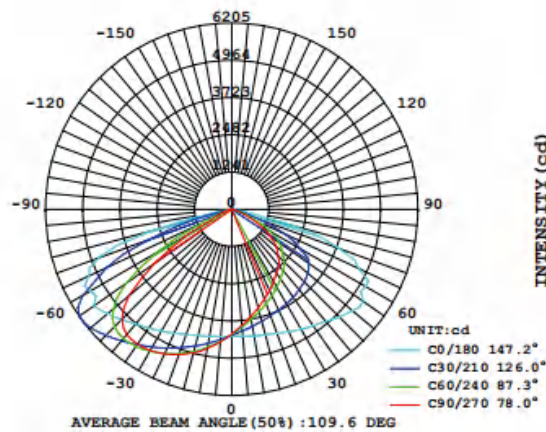
PHOTOELECTRIC

Model Number	Power	LED	Power Factor	CCT	Efficacy	Temperature
GH-SLL-50W	50W	Philips SMD3030 96PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃
GH-SLL-75W	75W	Philips SMD3030 96PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃
GH-SLL-100W	100W	Philips SMD3030 144PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃
GH-SLL-120W	120W	Philips SMD3030 144PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃
GH-SLL-150W	150W	Philips SMD3030 192PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃
GH-SLL-180W	180W	Philips SMD3030 192PCS	PF≥0.95	2700-6500K	≥130LM/W	-25℃±45℃

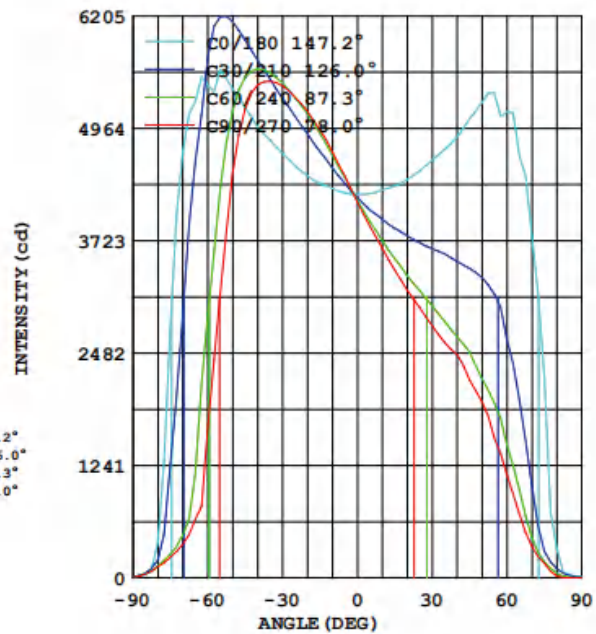


DATA OF LAMP		Imax (cd)	6426	S/MH (C0/180)	1.78
MODEL	3030	EFFICIENCY(%)	100.0	S/MH (C90/270)	1.76
NOMINAL POWER(W)	120	TOTAL FLUX(lm)	16198	Voltage (V)	220.1
RATED VOLTAGE (V)	220	EFFICIENCY (lm/W)	134.2	Current (A)	0.554
NOMINAL FLUX(lm)	16198.0	η up (%)	0.0	Power (W)	120.6
LAMPS QUANTITY	1	η down (%)	100.0	Power Factor (PF)	0.988
TEST VOLTAGE (V)	220.2	Effective Flux(lm)	15881.4	EET	0.104

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



PACKAGING

Item	50W	75W	100W	120W	150W	180W
Product Size(L*W*H)	559*195*98.5mm	559*195*98.5mm	609*244*98.5mm	609*244*98.5mm	660*244*98.5mm	660*244*98.5mm
N.W.(Kgs)	3.2kg	3.5kg	4.1kg	4.3kg	4.8kg	5.0kg
Outer Carton(L*W*H)	595*225*160mm	595*225*160mm	645*275*160mm	645*275*160mm	695*275*160mm	695*275*160mm
Q'ty/CTN	1PC	1PC	1PC	1PC	1PC	1PC



Flood Light-TFD Series



APPLICATIONS

- Stadiums floodlights
- LED Gym Lighting
- Squares
- Soccer and golf course lighting
- Sports Arenas
- Airport , Port



PRODUCT FEATURES

- Fin-type 1060 Aluminum is adopted.
- Angle adjustable for each single modules.
- Well-known brand LED, avoiding trouble for project.
- Optional 5 or 7 years warranty.
- High presion optical lens with diffrent beam angles for options.
Do not turn yellow after use.High brightness.Better lumen maintenance rate.
- Well known Brand LED Chips.Efficacy up to 140lm/w.Ra>80, SDCM<3 with high uniformity.
- Stainless steel screws.Anti-corrosions,reliable performance.



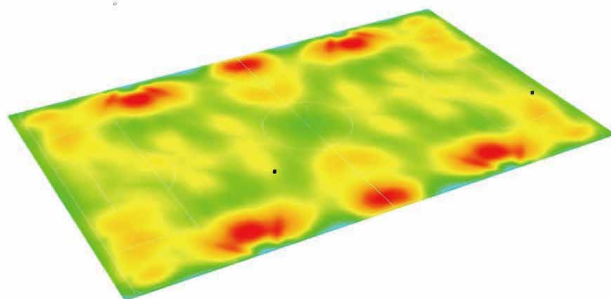
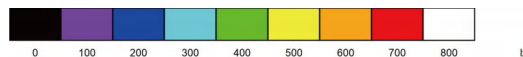
PHOTOELECTRIC

Moudel Number	Power	LED	Input Voltage	CCT	Efficacy	LED driver
GH-TFD-120/150W	120W/150W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-240/300W	240W/300W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-360/450W	360W/450W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-480/600W	480W/600W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-720/900W	720W/900W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-960/1200W	960W/1200W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFD-1200/1500W	1200W/1500W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell

OPTICS

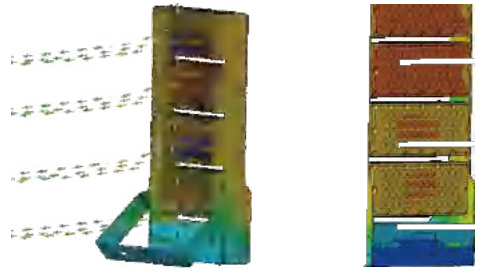
Scientific lighting distributions.

More energy-saving by higher illuminance utility rate.

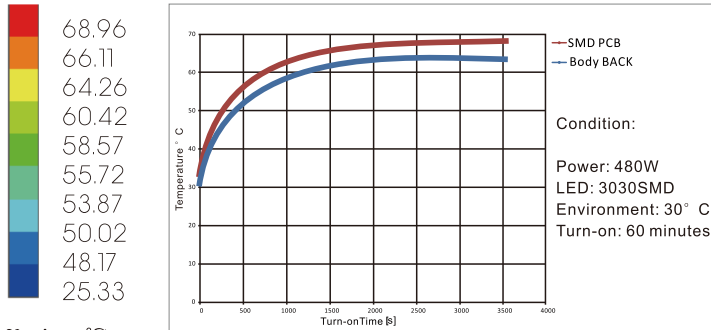


THERMAL MANAGEMENT

- Scientific thermal structure for better lumen maintenance rate.
- With advanced FEA technology, the structure is optimized during design process.
- Thus our clients are buying products at best cost-efficiency and reliable quality.



TEMPERATURE-RISE CURVE



Unit: °C



FIN TYPE CNC ALUMINUM

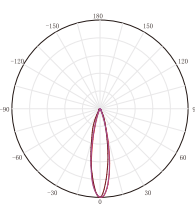
Thermal Conductivity = **230W/(M.K)**
Surface Area of or heat sinking = **90CM²/W**

V.S.

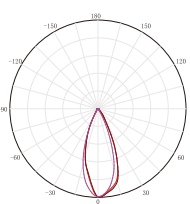


DIE-CASTING ALUMINUM

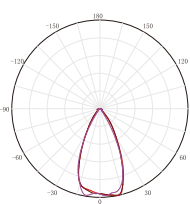
Thermal Conductivity = **96W/(M.K)**
Surface Area of or heat sinking = **50-60CM²/W**



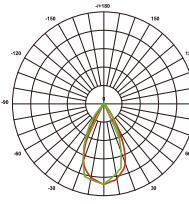
20°



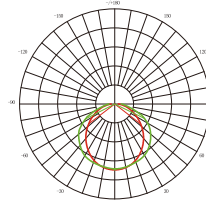
40°



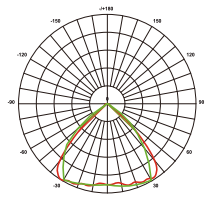
60°



90°



120°



140° * 100°

PACKAGING

Item	120/150W	240/300W	360/450W	480/600W	720/900W	960/1200W	1200/1500W
Product Size(L*W*H)	330*230*80mm	330*365*83mm	330*550*83mm	330*675*83mm	625*550*83mm	625*680*83mm	625*855*83mm
N.W.(Kgs)	4.35kg	6.45/6.5kg	10.3/10.5kg	12.2/12.5kg	18.2/18.3kg	23.35/23.45kg	27.5/28.45kg
Outer Carton(L*W*H)	340*240*102mm	340*370*105mm	340*560*105mm	340*690*1105mm	650*560*105mm	640*700*105mm	940*670*130mm
Q'ty/CTN	1PC	1PC	1PC	1PC	1PC	1PC	1PC

Flood Light-TFDA Series



APPLICATIONS

- Stadiums floodlights
- LED Gym Lighting
- Squares
- Soccer and golf course lighting
- Sports Arenas
- Airport , Port



PRODUCT FEATURES

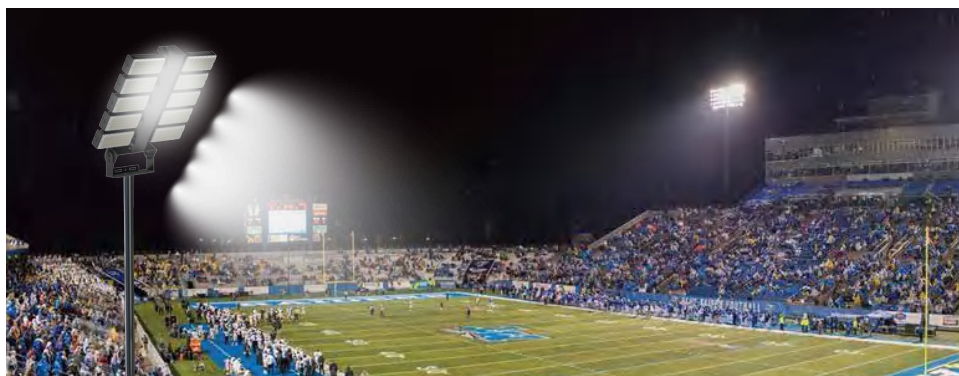
- Genuine Taiwan Meanwell LED Driver is adopted. Stable performance. Trouble-free for projects.
- Single Modules are adjustable. Either vertically or horizontally. Met the requirements for precision lighting distributions.
- Different lenses for diversified lighting distributions.
- Famous brand LED chip. Brighter luminous flux. Longer longevity.
- Strong bracket. The angle is lockable and fixed with screws. Resistant to strong wind and corrosion.

STRUCTURE

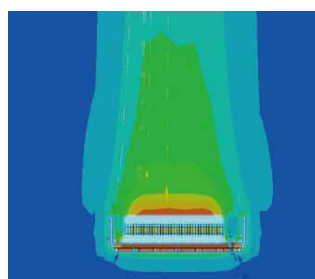
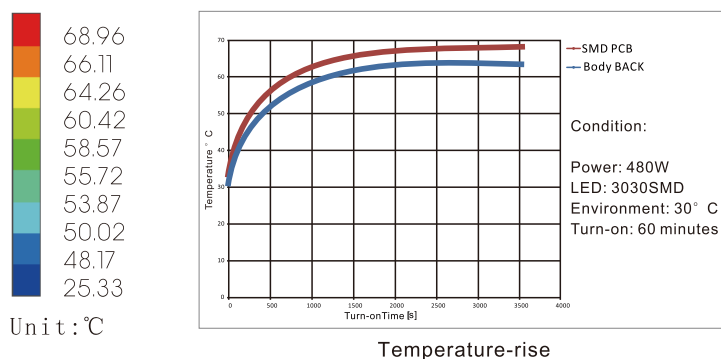
- Universal input voltage AC100-305V/347-480V.50/60Hz.
- Constant current output.
- Operational lifespan > 50,000 hours.
- Efficiency 91.5%.
- 5 years warranty.
- Air convection structure has been adopted for battery house. Separated spaces for cool and hot parts. Lower temperature for LED driver, longer longevity.

PHOTOELECTRIC

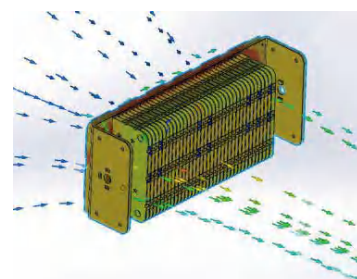
Model Number	Power	LED	Input Voltage	CCT	Efficacy	LED driver
GH-TFDA-480W	480W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-600W	600W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-720W	720W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-900W	900W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-960W	960W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-1200W	1200W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-1200W	1200W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell
GH-TFDA-1500W	1500W	Lumileds SMD3030/5050	AC100-305V	2700-6500K	140LM/W	Taiwan Meanwell



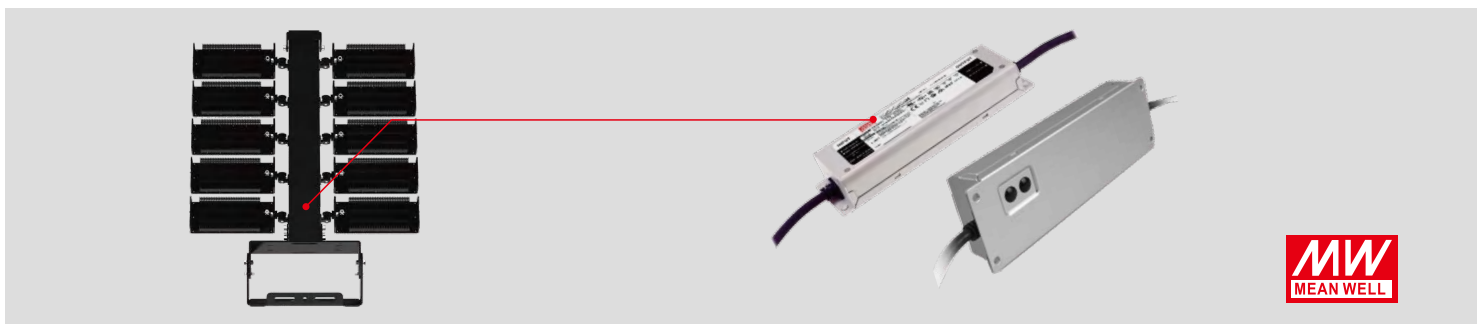
TEMPERATURE-RISE CURVE



Thermal Effect to Environment



Thermal Air Convection



Horizontal Adjustable



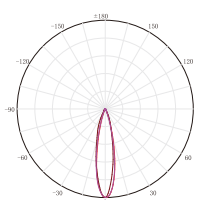
Vertical Adjustable



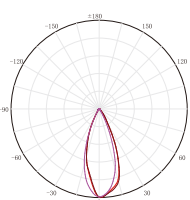
Lens available 20°/40°/60°/90°/120°/140°x100°

PACKAGING

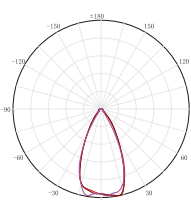
Item	480W/600W	720W/900W	960W/1200W	1200W/1500W
Product Size(L*W*H)	780*560*119mm	780*708*119mm	780*856*119mm	780*1004*119mm
N.W.(Kgs)	16.7/17.5kg	22.5/24.5kg	27.5/29kg	32.6/34kg
Outer Carton(L*W*H)	800*600*150mm	800*750*150mm	800*900*150mm	800*1050*150mm
Q'ty/CTN	1PC	1PC	1PC	1PC



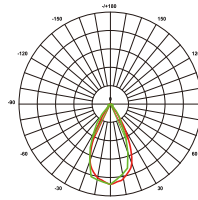
20°



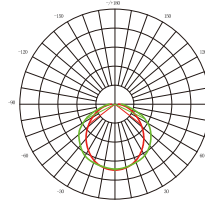
40°



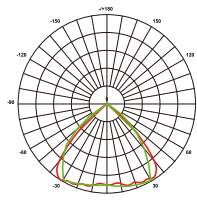
60°



90°



120°



140° * 100°

Flood Light-TFDB Series



· Stadiums
· Industrial Facilities
· Squares

· Football Fields, Tennis court
· Exterior of Buildings
· Airport



PRODUCT FEATURES

- Anti-glare shell improving the surface Lux.
- >160lm/W CREE or Lumileds LEDs.
- High thickness modular aluminum heat sink.
- Easy-carry hHandle design.
- Mult beam angle option PC optical lens.
- High strength and rotating bracket.
- Top standard 10KV surge protection.
- IP67 grade waterproof LED drivers.



Moudel Number	Power	LED	Input Voltage	CCT	Efficacy	LED driver
GH-TFDB-250W	250W	Philips SMD3030 7S*49P 343 Pcs	AC100-305V	2700-6500K	≥150LM/W	MeanwellELG or HLG driver
GH-TFDB-500W	500W	Philips SMD3030 7S*49P 682 Pcs	AC100-305V	2700-6500K	≥150LM/W	MeanwellELG or HLG driver
GH-TFDB-750W	750W	Philips SMD3030 7S*49P 1029Pcs	AC100-305V	2700-6500K	≥150LM/W	MeanwellELG or HLG driver
GH-TFDB-1000W	1000W	philips SMD3030 7S*49P 1372Pcs	AC100-305V	2700-6500K	≥150LM/W	MeanwellELG or HLG driver



DESIGN FEATURES



Single module adjustment angle light distribution, 25°/46°/60°/90° angleless PC cover



Import Philips LED lamp beads, Light efficiency $\geq 150\text{LM/W}$



Using fins 1060 pure aluminum heat dissipation, air convection design, Better heat dissipation, heat sink 0.5mm



Use 304 stainless steel screws



IP67 waterproof connectors, safe, Convenient.



Meanwell ELG or HLG driver

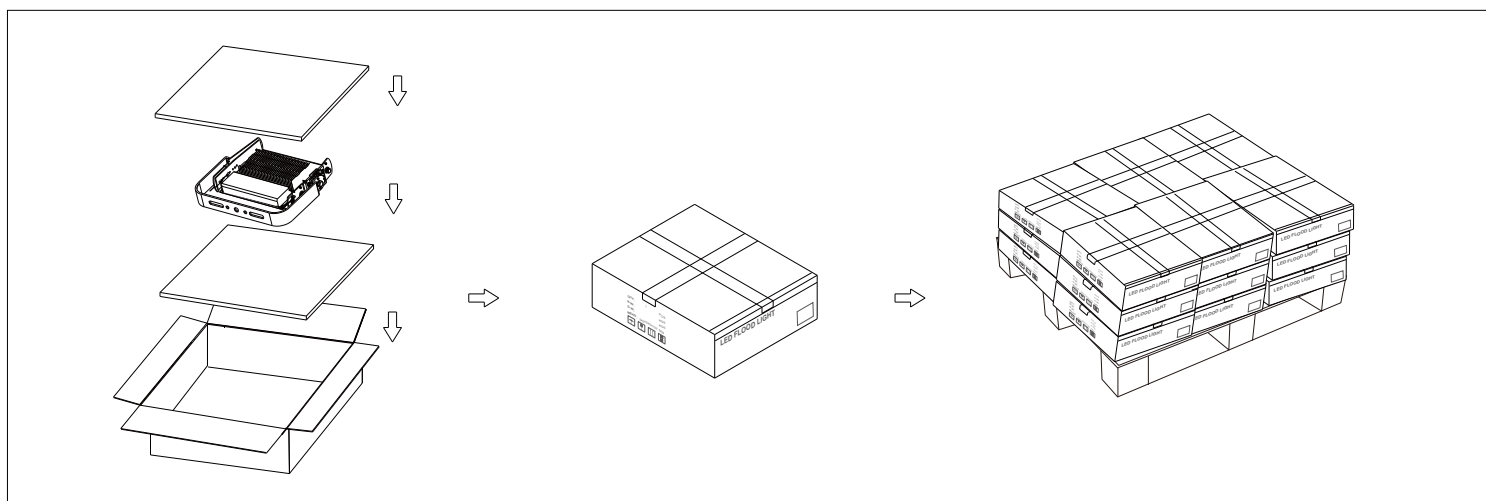


Independent power box design to support more power, which is beneficial to light body heat dissipation, reducing light decay and prolonging service life



Refined iron phosphide bracket

PRODUCT PACKAGING



PACKAGING

Item	250W	500W	750W	1000W
Product Size(L*W*H)	438*270*128mm	438*495*128mm	438*696*128mm	438*896*128mm
N.W.(Kgs)	6.5kg	12.5kg	18.5kg	23kg
Outer Carton(L*W*H)	470*300*150mm	470*530*150mm	470*730*150mm	470*930*150mm
G.W.(Kgs)	7.2kg	13.5kg	20.1kg	25.2kg

UFO-HBK Series



APPLICATIONS

- Large Warehouse
- Workshop
- Restaurants
- Libraries
- Supermarket
- Sports Center
- Hospitals
- Garment Stores



PRODUCT FEATURES

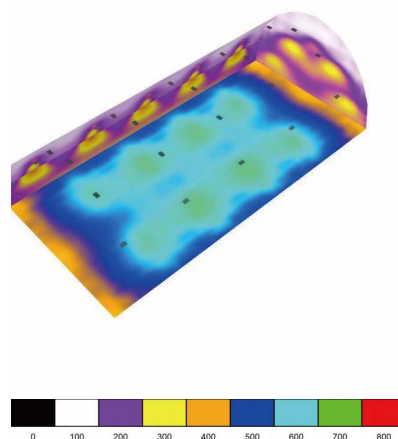
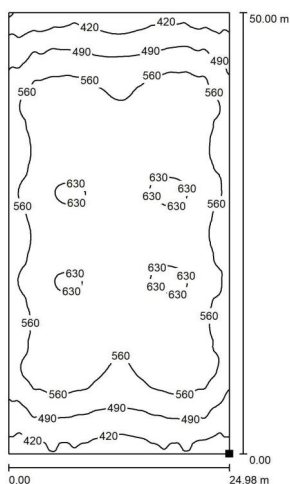
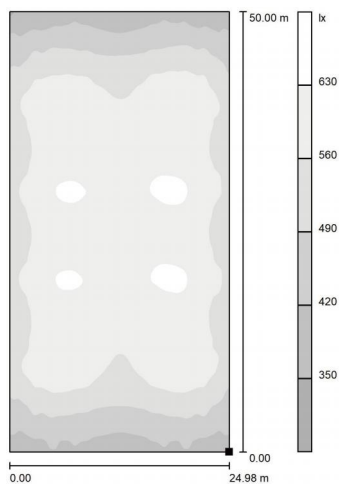
- Fin-type CNC aluminum heat sinker. More surface area for heat-sinking. It is lighter weight compared to traditional die-casting aluminum body at the same wattage. So it is less pressure for roofs and cheaper transportation costs.
- Lumileds 2835 SMD light source. Efficacy up to 170LM/W. High uniformity.
- Quick conductivity aluminum PCB. The heat is transmitted from LED to body quickly and therefore keeps the UFO high lumen.
- High quality optical lens up to 82% transmission rate. 60/90/120 beam angles available for choices.
- This product has passed TUV GS certificate.

STRUCTURE

- Sealed by UV-proof silica gel.
- Meanwell/Inventronics/Sosen or customized LED driver.
- 6KV surge proof. If installed in trunder frequently areas, an extra SPD is recommended to be connected.
- IP65 Protection grade for outdoor use. Can not be submerged into water. Can not be knocked by hard tools.
- Two ways of installation: Hook or bracket mount.

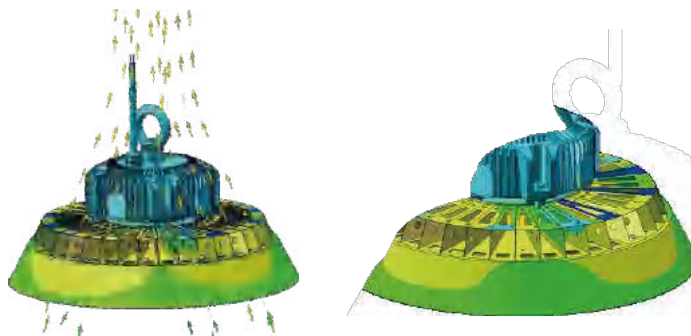
PHOTOELECTRIC

Model Number	Power	LED	Input Voltage	CCT	Efficacy	LED driver
GH-HBK-60W	60W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen
GH-HBK-100W	100W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen
GH-HBK-150W	150W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen
GH-HBK-200W	200W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen
GH-HBK-250W	250W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen
GH-HBK-300W	300W	Lumileds SMD2835	AC100-305V	2700-6500K	170LM/W	Meanwell/Sosen

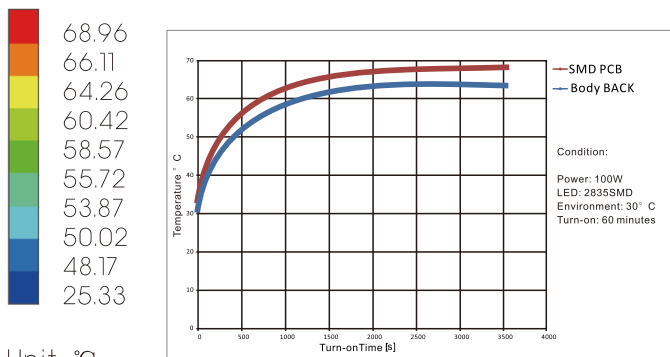


THERMAL MANAGEMENT

- Scientific thermal structure for better lumen maintenance rate.
- With advanced FEA technology, the structure is optimized during design process.
- Thus our clients are buying products at best cost-efficiency and reliable quality.



TEMPERATURE-RISE CURVE



V.S.



FIN TYPE CNC ALUMINUM

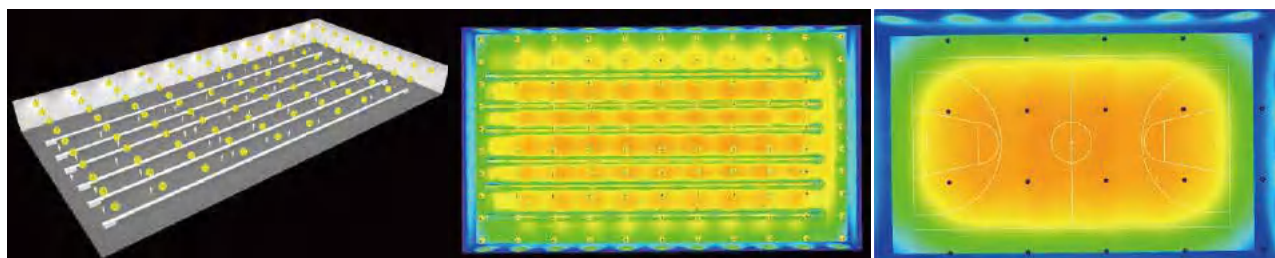
Thermal Conductivity = **230W/(M.K)**

Surface Area of heat sinking = **90CM²/W**

DIE-CASTING ALUMINUM

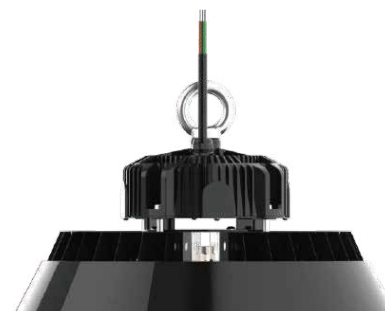
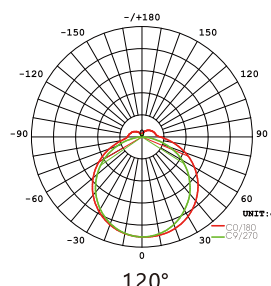
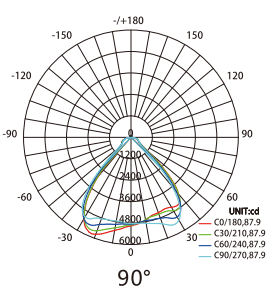
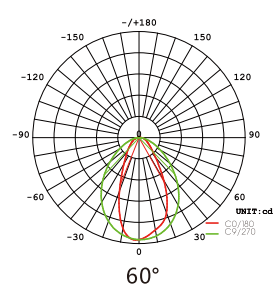
Thermal Conductivity = **96W/(M.K)**

Surface Area of heat sinking = **50-60CM²/W**



PACKAGING

Item	60W	100W	150W	200W
Product Size(L*W*H)	230*122mm	270*184mm	330*194mm	380*203mm
N.W.(Kgs)	1.3kg	2.0kg	2.75kg	3.3kg
Outer Carton(L*W*H)	260*260*160mm	300*300*180mm	370*370*190mm	420*420*220mm
Q'ty/CTN	1PC	1PC	1PC	1PC



Corn Light-CL6 Series



APPLICATIONS

- Large Warehouse
- Street lights
- Garden lights
- Workshop
- Supermarket
- Garment Stores
- Replacements of HPS, CFL, MHL and other traditional lamps



PRODUCT FEATURES

- IP64 waterproof grade Led corn light is the best replacement for HID, HPS, MH, CFL and other traditional lamps, used in courtyard lights, street lights and other LED light source.
- The radiator is 6063 aluminum and the power supply is filled with thermal silica to accelerate the heat dissipation, thereby reducing the light decay, which can guarantee the service life.
- Adopt imported Philips led chip, lamp luminous efficiency can reach 180lm /W, higher energy saving efficiency.
- 3 or 5 years warranty commitment.
- The input voltage can be AC 85-265V/AC100-277V/ DC 12-24V/ DC36V.

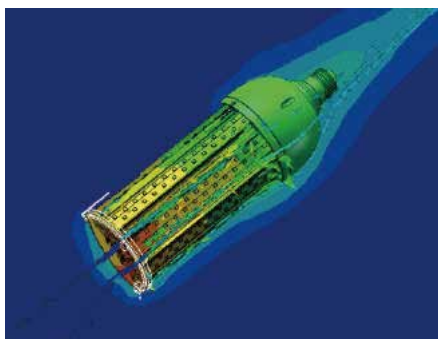
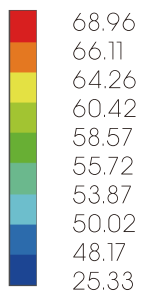
STRUCTURE

- Thick base. Optional E27 E26 E40 E39.
- Clear or Milky shade.
- 85-265VAC Constant current driver. Thermal conductive glue. IP64 Protection. Anti water drops. Efficiency > 85%.
- 6063 aluminum heat sinker. Thermal conductivity 209W/M.K. Large heat sinking area. Air convection. better lumen maintenance rate.
- High thermal conductivity PCB better lumen maintenance rate.
- 2835 SMD. High efficacy. low lumen loss.

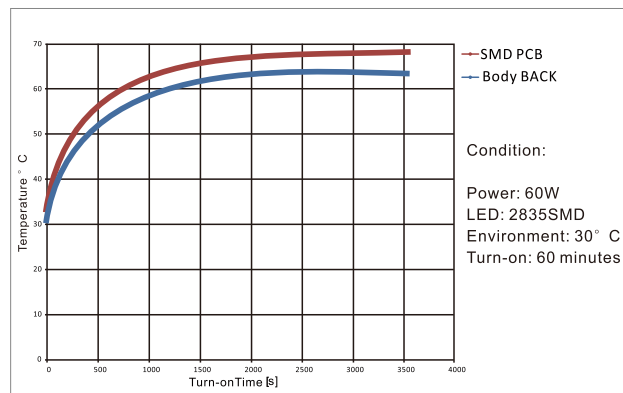
Model Number	Power	LED	Product Size	N.W.(Kgs)	Efficacy
GH-CL6-12W	12W	Lumileds SMD2835	64*157mm	272g	130/150/180LM/W
GH-CL6-16W	16W	Lumileds SMD2835	64*167mm	290g	130/150/180LM/W
GH-CL6-20W	20W	Lumileds SMD2835	64*187mm	327g	130/150/180LM/W
GH-CL6-24W	24W	Lumileds SMD2835	64*207mm	362g	130/150/180LM/W
GH-CL6-30W	30W	Lumileds SMD2835	E27:93*235/E40:93*245mm	710g	130/150/180LM/W
GH-CL6-35W	35W	Lumileds SMD2835	E27:93*255/E40:93*265mm	780g	130/150/180LM/W
GH-CL6-40W	40W	Lumileds SMD2835	E27:93*275/E40:93*285mm	850g	130/150/180LM/W
GH-CL6-50W	50W	Lumileds SMD2835	E27:93*295/E40:93*305mm	920g	130/150/180LM/W
GH-CL6-60W	60W	Lumileds SMD2835	E27:93*305/E40:93*315mm	950g	130/150/180LM/W
GH-CL6-80W	80W	Lumileds SMD2835	E40:133*262mm	1150g	130/150/180LM/W
GH-CL6-100W	100W	Lumileds SMD2835	E40:133*282mm	1300g	130/150/180LM/W
GH-CL6-120W	120W	Lumileds SMD2835	E40:133*302mm	1390g	130/150/180LM/W
GH-CL6-140W	140W	Lumileds SMD2835	E40:133*341mm	1580g	130/150/180LM/W



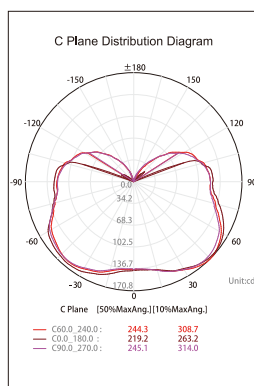
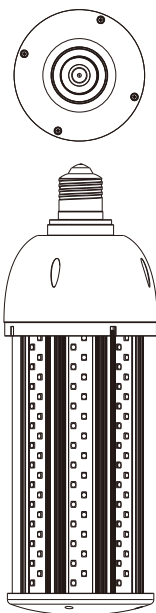
TEMPERATURE-RISE CURVE



Unit: °C



Temperature-rise Curve



Grow Light-GL Series

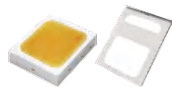


PRODUCT FEATURES

- Highest Efficacy LED Chips, Samsung 2835 & deep red Diodes provide 2.7 umol/J PPE.
- Full spectrum high PPE with good results. IR or UV is optional.
- IP67 UL Certification waterproof cords.
- 0-10V dimming knob, can be adjusted 20% 40% 60% 80%, with RJ12 port.
- Durable daisy chain with stainless steel hook.

STRUCTURE

- Can be hung horizontally and vertically, suitable for tall vertical planting projects, so that the bottom of the plant can also get enough light absorption
- Use INVENTRONICS drive power, more suitable for industrial engineering purposes.
- Using 6063 pure aluminum for heat dissipation, air convection design, better heat dissipation, heat sink 0.5mm.
- Use Samsung 2835 lamp beads (optional), which have the highest output of Umol on the market, and place them evenly to create a uniform plant canopy.



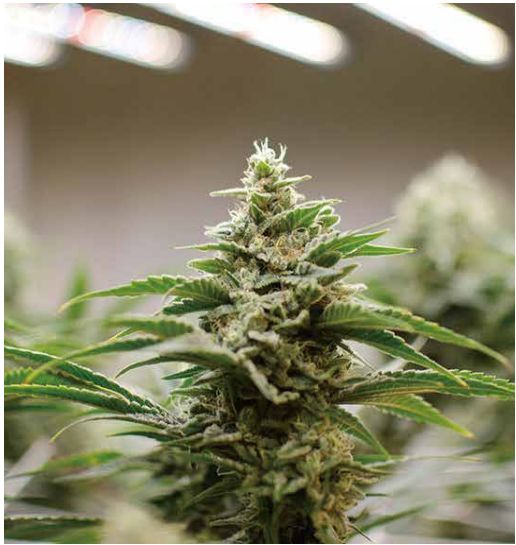
APPLICATIONS

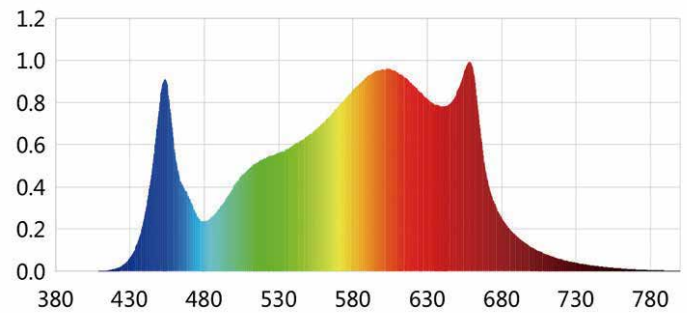
- Medical plants
- Indoor Greenhouse plants
- Vertical farm
- Hemp seeds, Bloom
- Hydroponic Growing



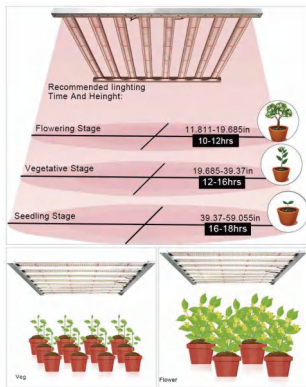
PHOTOELECTRIC

Moudel Number	Power	LED	Input Voltage	CCT	Power Factor	Frequency
GH-GL-480W	480W	Samsung 2835 1512pcs +Osram 660nm 72pcs	AC90-305V	3000-3500K	PF≥0.95	50/60Hz
GH-GL-650W	650W	Samsung 2835 2016pcs +Osram 660nm 96pcs	AC90-305V	3000-3500K	PF≥0.95	50/60Hz
GH-GL-800W	800W	Samsung 2835 2520pcs +Osram 660nm 128pcs	AC90-305V	3000-3500K	PF≥0.95	50/60Hz
GH-GL-1000W	1000W	Samsung 2835 3150pcs +Osram 660nm 160pcs	AC90-305V	3000-3500K	PF≥0.95	50/60Hz





APPLICATIONS



Product Packaging



Application Scenario



TECHNICAL PARAMETERS

Model Number	PPFD		PPE	PPF	Power Supply	Beam Angle
GH-GL-480W	@12": 843 μ mol/m ² /s	@24": 712 μ mol/m ² /s	2.8 μ mol/s	1344 μ mol/J	Inventronics	110°
GH-GL-650W	@12": 1456 μ mol/m ² /s	@24": 1156 μ mol/m ² /s	2.8 μ mol/s	1820 μ mol/J	Inventronics	110°
GH-GL-800W	@12": 1148 μ mol/m ² /s	@24": 960 μ mol/m ² /s	2.8 μ mol/s	2240 μ mol/J	Inventronics	110°
GH-GL-1000W	@12": 1650 μ mol/m ² /s	@24": 1415 μ mol/m ² /s	2.8 μ mol/s	2800 μ mol/J	Inventronics	110°

PACKAGING

Item	480W	650W	800W	1000W
Product Size(L*W*H)	1108*1105*50mm	1108*1105*50mm	1108*1105*50mm	1108*1105*50mm
N.W.(Kgs)	9.5kg	10.5kg	12.5kg	15kg
Outer Carton(L*W*H)	1130*580*85mm	1130*580*115mm	1130*580*85mm	1130*580*85mm
G.W.(Kgs)	10.5kg	11.5kg	13.5kg	17kg



Grow Light-GROW Series



APPLICATIONS

- Medical plants
- Indoor Greenhouse plants
- Vertical farm
- Hemp seeds, Bloom
- Hydroponic Growing



STRUCTURE

Imported Samsung & Osram Led chips:

Full spectrum which helps seeds, flowers, fruits to increase production output.

Power supply:

Adopting Meanwell power supply, voltage input range is AC90-305V 50/60Hz, with waterproof IP68 grade, full range of certification, suitable for planting requirements in different countries.

Can be cascaded dimming:

Dimming is 1-10V. The dimmer can be cascaded, up to 50 sets of dimming can be cascaded, easier operation.

The thickness of the lamp body is 4mm:

With a 4mm thick solid radiator, and the structure allows the led driver and the radiator to maintain a distance of 8-10mm, and a special process is used to separate the lamp body and the driving heat, which is conducive to better heat dissipation of the product and guarantee its service life.

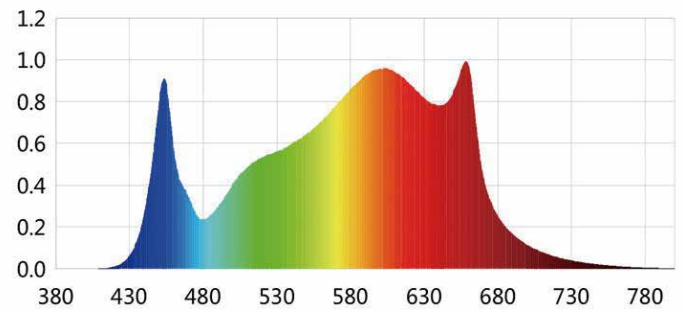
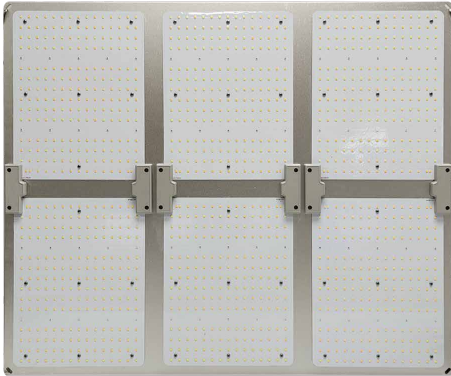


PHOTOELECTRIC

Model Number	Power	LED	Input Voltage	CCT	Power Factor	Frequency
GH-Grow-100W	100W	Samsung lm301b 210pcs +Osram 660nm 10pcs	AC100-277V	3200±150K	PF≥0.95	50/60Hz
GH-Grow-220W	220W	Samsung lm301b 420pcs +Osram 660nm 20pcs	AC100-277V	3200±150K	PF≥0.95	50/60Hz
GH-Grow-300W	300W	Samsung lm301b 630pcs +Osram 660nm 30pcs	AC100-277V	3200±150K	PF≥0.95	50/60Hz
GH-Grow-450W	450W	Samsung lm301b 840pcs +Osram 660nm 40pcs	AC100-277V	3200±150K	PF≥0.95	50/60Hz
GH-Grow-600W	600W	Samsung lm301b 1260pcs +Osram 660nm 60pcs	AC100-277V	3200±150K	PF≥0.95	50/60Hz



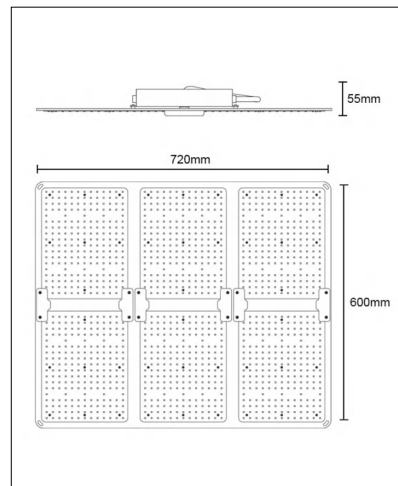
Grow Light-GROW Series



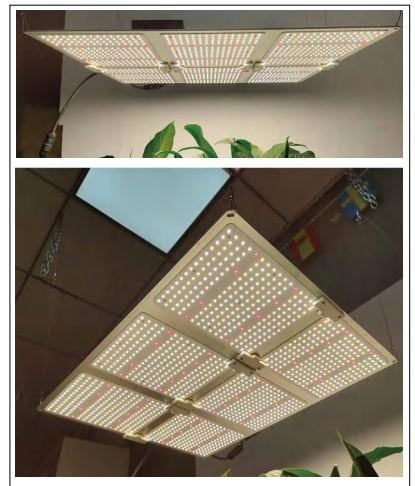
APPLICATIONS



Product dimension



Application Scenario



TECHNICAL PARAMETERS

Moudel Number	PPFD		PPE	PPF	Power Supply	Beam Angle
GH-Grow-100W	@18": 380 μ mol/m ² /s	@24": 165 μ mol/m ² /s	2.5 μ mol/s	250 μ mol/J	ELG-100	110°
GH-Grow-220W	@18": 530 μ mol/m ² /s	@24": 250 μ mol/m ² /s	2.5 μ mol/s	550 μ mol/J	ELG-100	110°
GH-Grow-300W	@18": 638 μ mol/m ² /s	@24": 325 μ mol/m ² /s	2.5 μ mol/s	750 μ mol/J	ELG-100	110°
GH-Grow-450W	@18": 743 μ mol/m ² /s	@24": 372 μ mol/m ² /s	2.5 μ mol/s	1125 μ mol/J	ELG-100	110°
GH-Grow-600W	@18": 968 μ mol/m ² /s	@24": 556 μ mol/m ² /s	2.5 μ mol/s	1500 μ mol/J	ELG-100	110°

PACKAGING

Item	100W	220W	300W	450W	600W
Product Size(L*W*H)	300*240*55mm	600*240*55mm	900*240*55mm	600*480*55mm	720*600*55mm
N.W.(Kgs)	1.8kg	3.5kg	4.8kg	6.8kg	9.5kg
Outer Carton(L*W*H)	320*260*75mm	620*260*75mm	920*260*75mm	620*500*75mm	740*620*75mm
G.W.(Kgs)	2.0kg	3.9kg	5.4kg	7.6kg	10.8kg