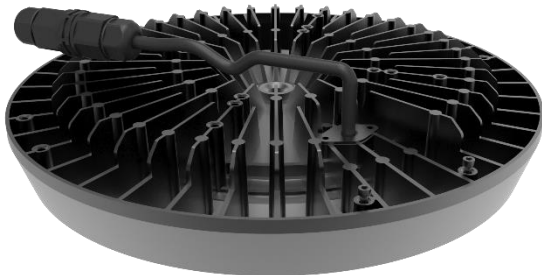


# GinoLED HO\* Module G2

\*HO: High lumen output

## Datasheet



## Driver Box



The GinoLED is a high power LED module with integrated heat sink for optimal thermal management and tailored optical design. The GinoLED lightweight and easy assembly design make installation become much easier. Up to 165Lm/W high efficacy designed to reach more energy saving. GinoLED is an IP65 unit equipped with IP connector for easy installation. GinoLED G2 version is designed for high efficacy, benefit energy saving solution.

## BENEFITS

- **Tailored optical and thermal design**
  - 60°x60° and 90°x90° lens design, adaptation to different mounting heights.
  - The high performance of GinoLED module is attributable to the omnidirectional nature of tree-like fins. Thanks to that, air streams are able to enter and exit from all directions.
- **IP65/IK08 protection**
  - Self-contained housing with heat sink, no extra protection is needed
- **High energy efficiency**
  - Up to 165Lm/W high efficacy\*.
- **Easy for assembly**
  - Thanks for GinoLED integrated design, only few step to finish assembly.
- **Long life time**
  - 50,000hrs

\* Mentioned efficacy without driver power consumption.

## APPLICATIONS

- Airport, Station, Factory
- Indoor Court, Exhibition Hall, Warehouse

**SPECIFICATION (4000K & 6500K)**

The typical values involved in this specification are under the following conditions:

Product category	t <sub>p</sub> -normal
GL-HO-G2 80-XXX-LXXXXX	50 °C
GL-HO-G2 120-XXX-LXXXXX	55 °C
GL-HO-G2 150-XXX-LXXXXX	60 °C
GL-HO-G2 180-XXX-LXXXXX	60 °C

	Parameter	GinoLED HO Module G2			
		GL-HO-G2 80	GL-HO-G2 120	GL-HO-G2 150	GL-HO-G2 180
<b>Light Output</b>	Typical Module flux	11600 lm	17400 lm	21750 lm	26100 lm
	Typical Module efficacy	165 Lm/W	165 Lm/W	165 Lm/W	165 Lm/W
	Optical	60° x 60° 90° x 90°			
	CCT	4000K & 6500K			
	SDCM	5			
	Typical CRI (Ra)	80			
	Lifetime(L70B50 @ t <sub>p</sub> -normal)	50,000 hours			
<b>Electrical</b>	Typical input voltage	101V DC	151V DC	189V DC	226V DC
	Typical input current	0.7 A	0.7 A	0.7 A	0.7 A
	Module Power @( typical)	70W	106W	132W	158W
	Recommended Driver [TBD]	OSRAM OPTOTRONIC			
		80W: OT 100/220...240/1A4 1DIMA P7 120W: OT 150/220...240/1A4 1DIMA P7 150W: OT 150/220...240/1A4 1DIMA P7 180W: OT 200/220...240/1A4 1 DIMA P7			
<b>Mechanical</b>	Dimension	Φ296mmLx204mmH (Include Driver box)			Φ339mmLx233mmH (Include Driver box)
	Mounting	Suspended / wall mounted**			
	Optics	Polycarbonate lens			
	Module Weight	2.1 kg			2.8 kg
<b>Temperature</b>	Operating temp. range (t <sub>a</sub> )*	-30 ... 45°C			
	Storage temp. range*	-40 ... 80°C			
<b>Standard Compliance</b>	IP Rating	IP65			
	IK Rating	IK08			
	Certification	CE/CB/CQC Ready by Apr.2019			

**IP65 IK08**



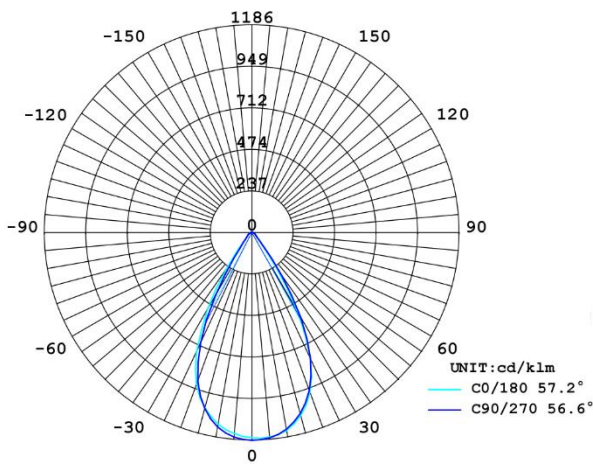
Due to the special conditions of manufacturing processes of LED, the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. Actual lumen output can be varied due to many factors like lamp factor of LED, input current/voltage, thermal conditions, many other optical tolerance, and measurement tolerance. The data above is for reference only. Please contact Osram sales or marketing staff for advice if customers has any specific demand on particular parameters.

Tolerance of measurements for the color rendering Ra is ±2.

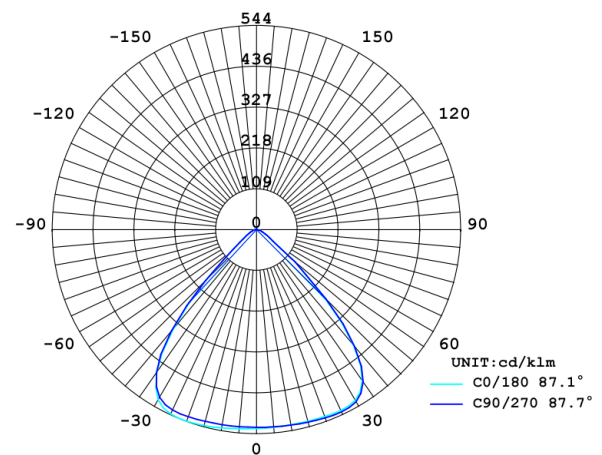
\* Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED module. The temperature of the LED module needs to be measured at the t<sub>c</sub>-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

\*\* Additional accessories are needed for Wall mounted, please contact with sales to get more information.

### PHOTOMETRICS



60°x60°



90°x90°

Due to the special conditions of manufacturing processes of LED, the polar candela distribution and distance illuminance can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. The actual data may differ from the typical data. Tolerance of measurements for beam angle is ±10°.

### Environmental and Application Conditions

<b>Ambient temperature range (t<sub>a</sub> on free air)</b>	-30~45°C	
<b>Operating (case) temperature range (t<sub>c max</sub>)</b>	GL-HO-G2 80	70°C
	GL-HO-G2 120	75°C
	GL-HO-G2 150	80°C
	GL-HO-G2 180	80°C
<b>Storage temperature range</b>	-40~+80°C	
<b>IP rating</b>	IP65	
<b>Mech. impact protection</b>	IK08	
<b>Lifetime @ t<sub>p</sub>-normal (L70/B50)</b>	50,000hrs	
<b>Net weight</b>	GL-HO-G2 80	2.1KG
	GL-HO-G2 120	
	GL-HO-G2 150	2.8KG
	GL-HO-G2 180	

### Standards / Normative Requirements

<b>Eye security</b>	IEC 62778
<b>Flammability</b>	IEC 60598-1
<b>Safety Requirements</b>	EN 62031 IEC 60598-1
<b>EMC / radio disturbance characteristics</b>	EN 55015
<b>EMC / immunity</b>	EN 61547
<b>EMC limits for harmonic current emissions</b>	IEC 61000-3-2
<b>EMC limitation of voltage changes, voltage fluctuations and flicker</b>	IEC 61000-3-3
<b>CE Mark</b>	Yes
<b>Application in Class I</b>	Yes

### Electrical parameters

Driving mode	Constant current	
Input voltage range	GL-HO-G2 80	91-111 VDC @700mA
	GL-HO-G2 120	136-166 VDC @700mA
	GL-HO-G2 150	170-208 VDC @700mA
	GL-HO-G2 180	203-249 VDC @700mA
Input current range	GL-HO-G2 80	630~770 mA
	GL-HO-G2 120	630~770 mA
	GL-HO-G2 150	630~770 mA
	GL-HO-G2 180	630~770 mA
Power Range	GL-HO-G2 80	63-77 W @700mA
	GL-HO-G2 120	95-117 W @700mA
	GL-HO-G2 150	119-145 W @700mA
	GL-HO-G2 180	142-174 W @700mA

### CCT / Color and Color rendering parameters

Product	Min. CCT (k)	Max. CCT (k)	Center		Ra
			CIE X	CIE Y	
GL-HO-G2 80-840 L60x60 GL-HO-G2 120-840 L60x60 GL-HO-G2 150-840 L60x60 GL-HO-G2 180-840 L60x60 GL-HO-G2 80-840 L90X90 GL-HO-G2 120-840 L90X90 GL-HO-G2 150-840 L90X90 GL-HO-G2 180-840 L90X90	3710K	4260K	0.3800	0.3800	>80
GL-HO-G2 80-865 L60x60 GL-HO-G2 120-865 L60x60 GL-HO-G2 150-865 L60x60 GL-HO-G2 180-865 L60x60 GL-HO-G2 80-865 L90x90 GL-HO-G2 120-865 L90x90 GL-HO-G2 150-865 L90x90 GL-HO-G2 180-865 L90x90	6020K	7040K	0.3188	0.3388	

Remarks:

1. Test by  $t_p$ -normal condition;
2. Tolerance of measurements for the color rendering Ra is  $\pm 2$ ;
3. Tolerance of measurements for the Chromaticity Coordinate is  $\pm 0.005$ ; the tolerance of CCT should be calculated accordingly.

### Brightness parameters

Product	Current(mA)	Lumen Flux(Lm)	
		Min.	Max.
GL-HO-G2 80	700	10440	12760
GL-HO-G2 120	700	15660	19140
GL-HO-G2 150	700	19575	23925
GL-HO-G2 180	700	23490	28710

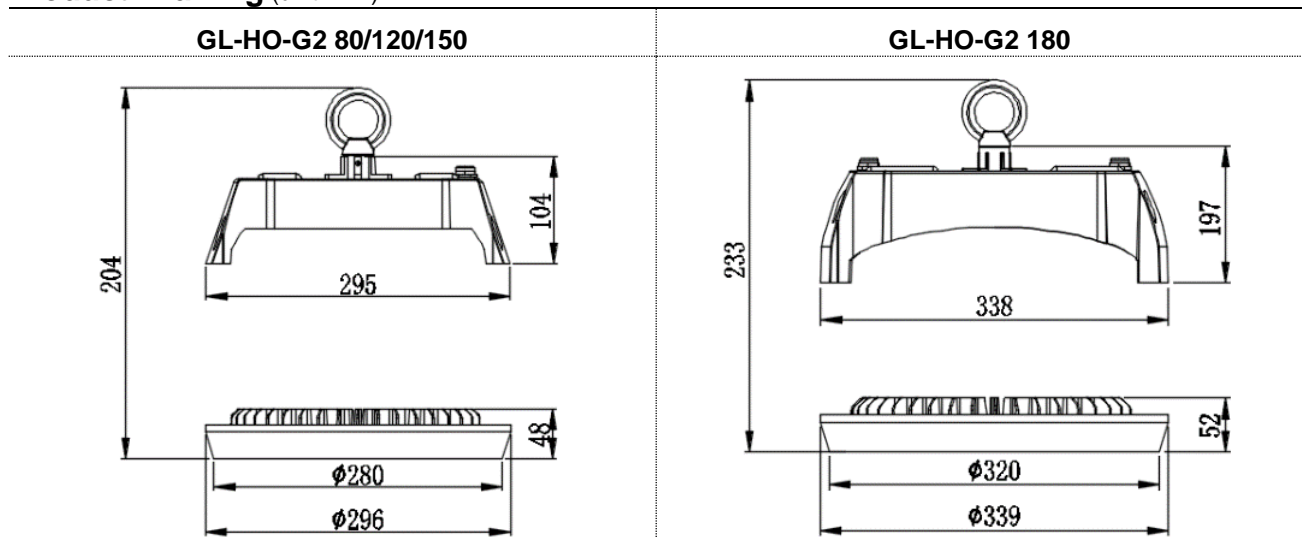
**Remarks:**

- Ranking at  $t_p$ -normal condition.
- Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.
- The temperature of the LED module must be measured at the  $t_c$ -point according to EN60598-1 in thermal stable status. Exact location of  $t_c$  point please see "safety information".
- Due to the special conditions of the manufacturing processes of LED, the typical data or calculated correlations of technical parameters can only reflect statistical figures. These do not necessarily correspond to the actual parameters of each single product, which could differ from the typical data and calculated correlations or the typical characteristic line. If requested, e.g. because of technical improvements, these typ. data will be changed without any further notice.
- Tolerance of measurement of the luminous flux is  $\pm 5\%$ .

### Lumen maintenance

TBD

### Product Drawing (unit: mm)

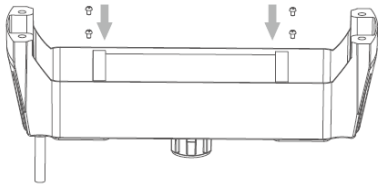


### Sales & Technical Support

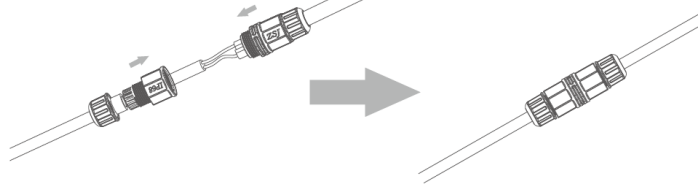
#### Application:

GinoLED HO module provide IP65 connector can easy be installed with IP67 driver, total system meet IP65 requirement.

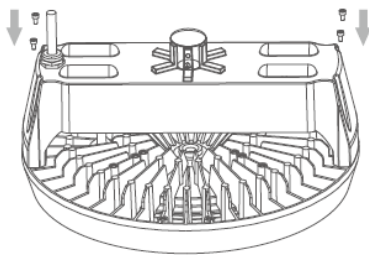
1. Assembly driver



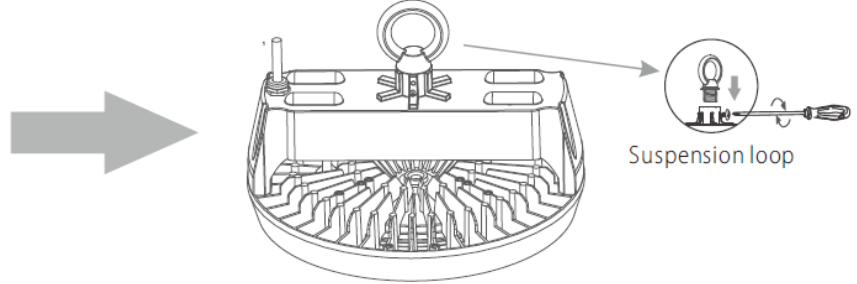
2. Wiring with IP connector



4. Assembly driver box on the module



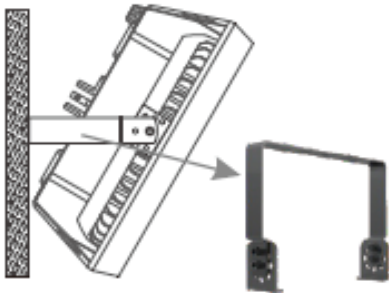
4. Assembly hook and ready to install



Suspension loop

#### Other assembly accessories

##### Wall mounted accessory\*



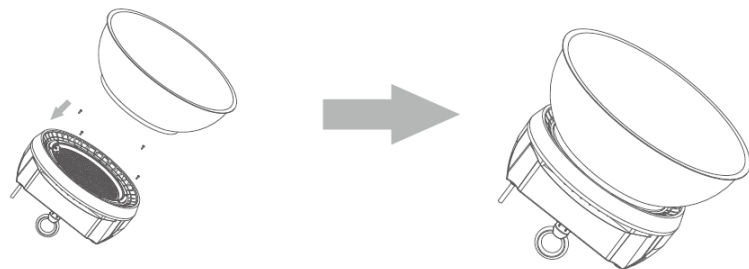
##### PC / Aluminum cover\*



PC Cover  
(GL-HO 80/100/120/180)



Aluminum Cover  
(GL-HO 80/100/120/180)



\* Additional accessories are needed for Wall mounted, please contact with sales to get more information.

\*\*Additional accessories are needed for reflector cover, procurement required, please contact with sales to get more information.

### Order Number

Model	EAN10	S-unit	EAN40	S-unit
GL-HO-G2 80-840 L60X60	4062172051354	1	4062172051361	1
GL-HO-G2 80-840 L90X90	4062172051378	1	4062172051385	1
GL-HO-G2 80-865 L60X60	4062172051392	1	4062172051408	1
GL-HO-G2 80-865 L90X90	4062172051415	1	4062172051422	1
GL-HO-G2 120-840 L60X60	4062172051439	1	4062172051446	1
GL-HO-G2 120-840 L90X90	4062172051453	1	4062172051460	1
GL-HO-G2 120-865 L60X60	4062172051477	1	4062172051484	1
GL-HO-G2 120-865 L90X90	4062172051491	1	4062172051507	1
GL-HO-G2 150-840 L60X60	4062172051514	1	4062172051521	1
GL-HO-G2 150-840 L90X90	4062172051538	1	4062172051545	1
GL-HO-G2 150-865 L60X60	4062172051576	1	4062172051583	1
GL-HO-G2 150-865 L90X90	4062172051590	1	4062172051606	1
GL-HO-G2 180-840 L60X60	4062172051613	1	4062172051620	1
GL-HO-G2 180-840 L90X90	4062172051651	1	4062172051668	1
GL-HO-G2 180-865 L60X60	4062172051675	1	4062172051682	1
GL-HO-G2 180-865 L90X90	4062172051699	1	4062172051705	1

### Matching Driver Order Number

TBD



### Safety information

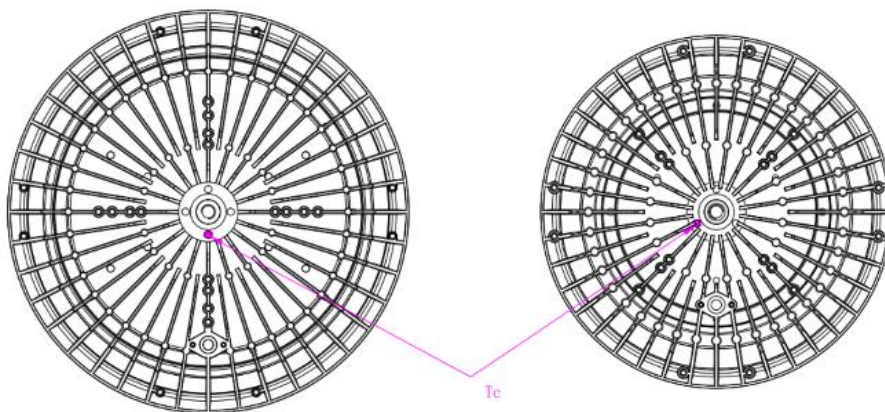
- ★ The LED module itself and all its components may not be mechanical stressed.
- ★ Assembly must not damage or destroy conducting paths on the circuit board.
- ★ To avoid mechanical damage to the connecting cables, the module should be attached securely to the fixture. Heavy vibration should be avoided.
- ★ Installation of LED modules with (power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installation.
- ★ Please ensure that the power supply is of adequate power to operate the total load.
- ★ Please ensure that the power supply with correct output parameters (driving mode, voltage, current) for LED module.
- ★ Pay attention to standard ESD precautions when installing the module.
- ★ If surge protection structure not within power supplier, a lightning protector should be needed additionally for outdoor application.



- ★ Higher  $t_c$  application is not recommended, under the condition of higher than  $t_{c\ max}$ , the product life is shortened.
- ★  $t_c$  /  $t_p$  location as below:

GL-HO-G2 180

GL-HO-G2 80/120/150



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