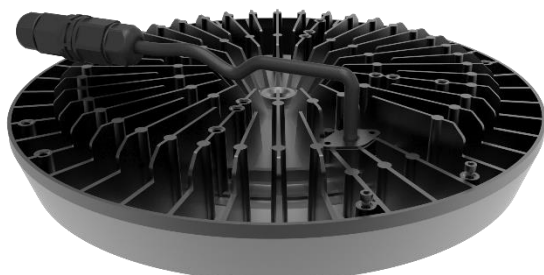


# GinoLED HO\* Module E

\*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 146Lm/W high efficacy designed to reach more energy saving. GinoLED is an IP65 unit equipped with IP connector for easy installation. GinoLED E version is designed for good enough specification to fulfill customer basic requirements.

## 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 146Lm/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-E 80-XXX-LXXXXX	55 °C
GL-HO-E 120-XXX-LXXXXX	60 °C
GL-HO-E 150-XXX-LXXXXX	70 °C
GL-HO-E 180-XXX-LXXXXX	70 °C

	Parameter	GinoLED HO Module E			
		GL-HO-E 80	GL-HO-E 120	GL-HO-E 150	GL-HO-E 180
Light Output	Typical Module flux	11000 lm	16500 lm	20500 lm	25600 lm
	Typical Module efficacy	143 Lm/W	143 Lm/W	146 Lm/W	143 Lm/W
	Optical	60° x 60°			
		90° x 90°			
	CCT	4000K & 6500K			
	SDCM	5			
	Typical CRI (Ra)	80			
Electrical	Lifetime(L70B50 @ t <sub>p</sub> -normal)	50,000 hours			
	Typical input voltage	110V DC	165V DC	200V DC	256V DC
	Typical input current	0.7 A	0.7 A	0.7 A	0.7 A
	Module Power @ ( typical)	77W	116W	140W	179W
Mechanical	Dimension	Φ296mmL x 199mmH			Φ339mmL x 228mmH
		(Include Driver box)			(Include Driver box)
	Mounting	Suspended / wall mounted**			
	Optics	Polycarbonate lens			
Temperature	Module Weight	2.1 kg			2.8 kg
	Operating temp. range (t <sub>a</sub> )*	-30 ... 45°C			
	Storage temp. range*	-40 ... 80°C			
Standard Compliance	IP Rating	IP65			
	IK Rating	IK08			
	Certification	CE/CB/CQC			

# IP65 IK08



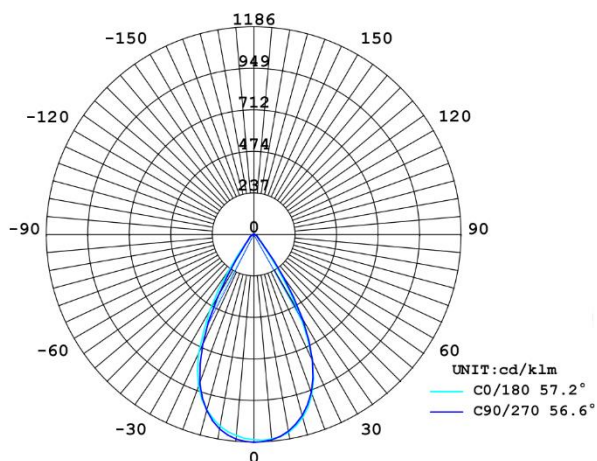
Due to the special conditions of manufacturing processes of LED, the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product. Actual lumen output can be varied due to many factors like lamp factor of LED, 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.

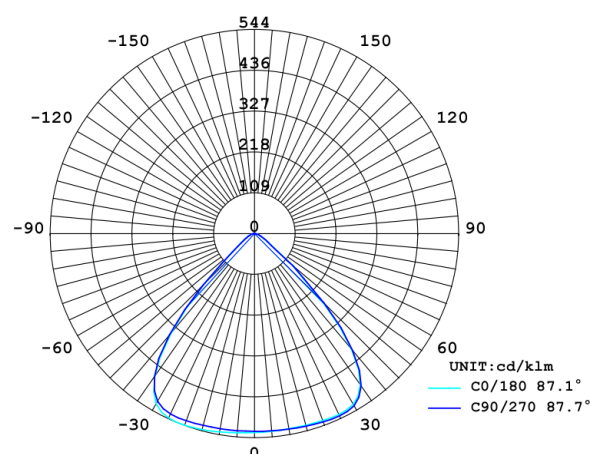
\* Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED module. The temperature of the LED module needs to be measured at the t<sub>c</sub>-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature 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  $\pm 10^\circ$ .

## Environmental and Application Conditions

Ambient temperature range ( $t_a$ on free air)	-30~45°C	
Operating (case) temperature range ( $t_c$ max)	GL-HO-E 80	75°C
	GL-HO-E 120	80°C
	GL-HO-E 150	90°C
	GL-HO-E 180	90°C
Storage temperature range	-40~+80°C	
IP rating	IP65	
Mech. impact protection	IK08	
Lifetime @ $t_p$ -normal (L70/B50)	50,000hrs	
Net weight	GL-HO-E 80/GL-HO-E 120/GL-HO-E 150	2.1KG
	GL-HO-E 180	2.8KG

## Standards / Normative Requirements

Eye security	IEC 62778	
Flammability	IEC 60598-1	
Safety Requirements	EN 62031 IEC 60598-1	
EMC / radio disturbance characteristics	EN 55015	
EMC / immunity	EN 61547	
EMC limits for harmonic current emissions	IEC 61000-3-2	
EMC limitation of voltage changes, voltage fluctuations and flicker	IEC 61000-3-3	
Working Voltage for insulation	GL-HO-E 80/GL-HO-E 120/GL-HO-E 150	350VDC
	GL-HO-E 180	550VDC
CE Mark	Yes	
Application in Class I	Yes	

## Electrical parameters

Driving mode	Constant current	
Input voltage range	GL-HO-E 80	99-121 VDC @700mA
	GL-HO-E 120	149-182 VDC @700mA
	GL-HO-E 150	180-220 VDC @700mA
	GL-HO-E 180	230-282 VDC @700mA
Input current range	GL-HO-E 80	630~770 mA
	GL-HO-E 120	630~770 mA
	GL-HO-E 150	630~770 mA
	GL-HO-E 180	630~770 mA
Power Range	GL-HO-E 80	69-85 W @700mA
	GL-HO-E 120	104-128 W @700mA
	GL-HO-E 150	126-154 W @700mA
	GL-HO-E 180	161-197 W @700mA

## CCT / Color and Color rendering parameters

Product	Min. CCT (k)	Max. CCT (k)	Center		Ra
			CIE X	CIE Y	
GL-HO-E 80-840 L60x60 GL-HO-E 120-840 L60x60 GL-HO-E 150-840 L60x60 GL-HO-E 180-840 L60x60 GL-HO-E 80-840 L90X90 GL-HO-E 120-840 L90X90 GL-HO-E 150-840 L90X90 GL-HO-E 180-840 L90X90	3710K	4260K	0.3800	0.3800	>80
GL-HO-E 80-865 L60x60 GL-HO-E 120-865 L60x60 GL-HO-E 150-865 L60x60 GL-HO-E 180-865 L60x60 GL-HO-E 80-865 L90x90 GL-HO-E 120-865 L90x90 GL-HO-E 150-865 L90x90 GL-HO-E 180-865 L90x90	5800K	6800K	0.3120	0.3280	

### 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.

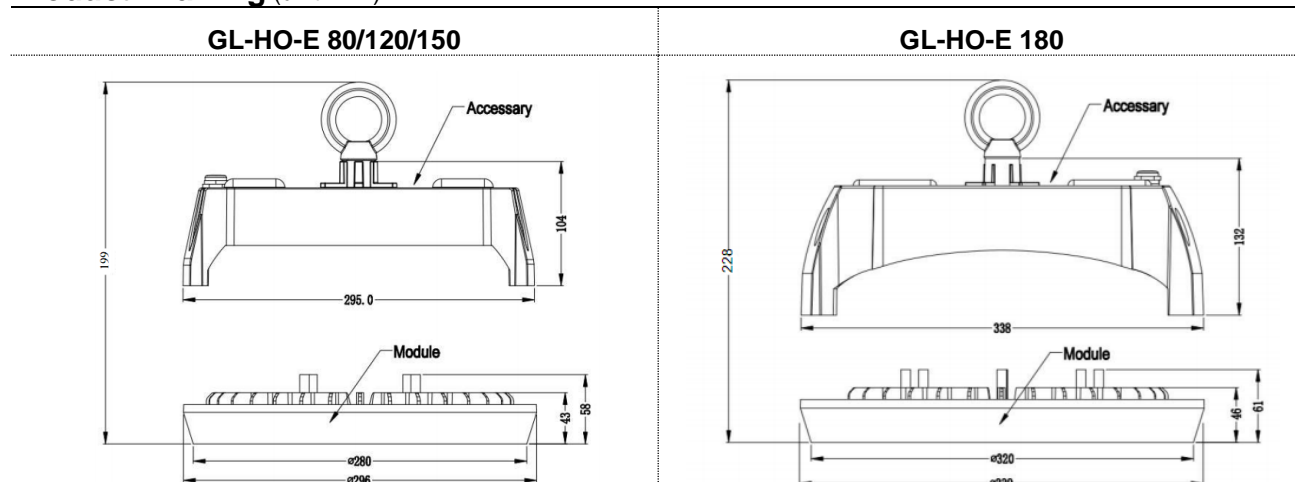
## Brightness parameters

Product	Current(mA)	Lumen Flux(Lm)	
		Min.	Max.
GL-HO-E 80	700	9900	12100
GL-HO-E 120	700	14850	18150
GL-HO-E 150	700	18450	22550
GL-HO-E 180	700	23040	28160

### 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  $\pm 5\%$ .

## Product Drawing (unit: mm)



## Driver matching information

Following recommended driver is matching GinoLED HO module as system using. By using OSRAM OPTOTRONIC® driver can provide system warranty. For more information, please contact our sales.

GinoLED HO module E		
Module Type	Driver type	Driver model
GL-HO-E 80-xxx-Lxxxx	ON/OFF	EM 100 120-277 700 P7
	ON/OFF	OT 100/220-240/700 P7
	1-10V	OT 100/220-240/1A4 2DIM P7
	AstroDIM	OT 100/220-240/1A4 1DIMA P7
	DALI	IT DALI 110/120-240/1A0 P7
	0-10V with 12V AUX	EM 100/120-277/1A DIM P6 AUX12
GL-HO-E 120-xxx-Lxxxx	ON/OFF	EM 150 120-277 700 P7
	ON/OFF	OT 150/220-240/700 P7
	1-10V	OT 150/220-240/1A4 2DIM P7
	AstroDIM	OT 150/220-240/1A4 1DIMA P7
	DALI	IT DALI 150/120-240/1A0 P7
	0-10V with 12V AUX	EM 150/120-277/1A DIM P6 AUX12
GL-HO-E 150-xxx-Lxxxx	ON/OFF	EM 150 120-277 700 P7
	ON/OFF	OT 150/220-240/700 P7
	1-10V	OT 150/220-240/1A4 2DIM P7
	AstroDIM	OT 150/220-240/1A4 1DIMA P7
	DALI	IT DALI 150/120-240/1A0 P7
	0-10V with 12V AUX	EM 150/120-277/1A DIM P6 AUX12
GL-HO-E 180-xxx-Lxxxx	ON/OFF	EM 200 120-277 700 P7
	ON/OFF	OT 200/220-240/700 P7
	1-10V	OT 200/220-240/1A4 2DIM P7
	AstroDIM	OT 200/220-240/1A4 1DIMA P7
	DALI	IT DALI 200/120-240/1A0 P7
	0-10V with 12V AUX	EM 200/120-277/1A DIM P6 AUX12

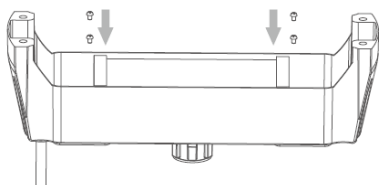
Remark: Please contact our sales to get driver order number information.

## Sales & Technical Support

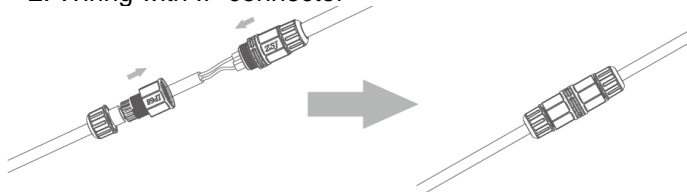
### Application:

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

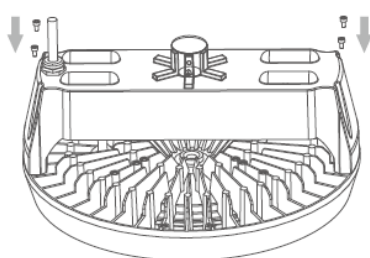
1. Assembly driver



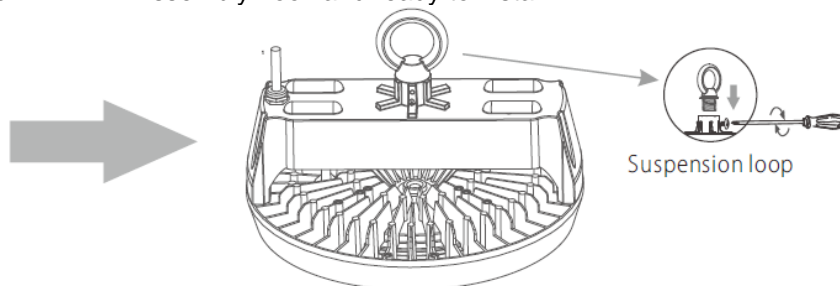
2. Wiring with IP connector



4. Assembly driver box on the module

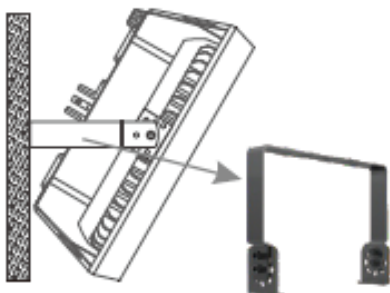


4. Assembly hook and ready to install



### Other assembly accessories

#### Wall mounted accessory\*



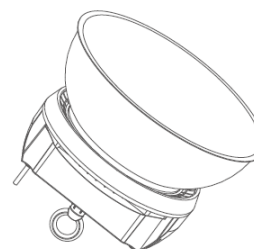
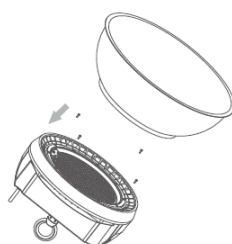
#### PC / Aluminum cover\*



PC Cover  
(GL-HO 80/120/150/180)



Aluminum Cover  
(GL-HO 80/120/150/180)



\* 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-E 80-840 L60X60	4062172344418	1	4062172344425	1
GL-HO-E 80-840 L90X90	4062172344432	1	4062172344449	1
GL-HO-E 80-865 L60X60	4062172344456	1	4062172344463	1
GL-HO-E 80-865 L90X90	4062172344470	1	4062172344487	1
GL-HO-E 120-840 L60X60	4062172344494	1	4062172344500	1
GL-HO-E 120-840 L90X90	4062172344517	1	4062172344524	1
GL-HO-E 120-865 L60X60	4062172344531	1	4062172344548	1
GL-HO-E 120-865 L90X90	4062172344555	1	4062172344562	1
GL-HO-E 150-840 L60X60	4062172344258	1	4062172344265	1
GL-HO-E 150-840 L90X90	4062172344272	1	4062172344289	1
GL-HO-E 150-865 L60X60	4062172344296	1	4062172344302	1
GL-HO-E 150-865 L90X90	4062172344319	1	4062172344326	1
GL-HO-E 180-840 L60X60	4062172344333	1	4062172344340	1
GL-HO-E 180-840 L90X90	4062172344357	1	4062172344364	1
GL-HO-E 180-865 L60X60	4062172344371	1	4062172344388	1
GL-HO-E 180-865 L90X90	4062172344395	1	4062172344401	1

Model	EAN10	S-unit	EAN40	S-unit	Matching module
GL-HO-G1 PC-Cover-S	AM187670055	1	4052899585812	8	GL-HO-E 80/GL-HO-E 120/GL-HO-E 150
GL-HO-G1 AL-Cover-S	AM187680055	1	4052899585829	8	GL-HO-E 80/GL-HO-E 120/GL-HO-E 150
GL-HO-G1 PC-Cover-B	AM187690055	1	4052899585836	8	GL-HO-E 180
GL-HO-G1 AL-Cover-B	AM187700055	1	4052899585843	4	GL-HO-E 180
GL-HO-G1 Black-Bracket-S	AM187720055	1	4052899585850	20	GL-HO-E 80/GL-HO-E 120/GL-HO-E 150
GL-HO-G1 Black-Bracket-B	AM187730055	1	4052899585867	20	GL-HO-E 180



## Safety information

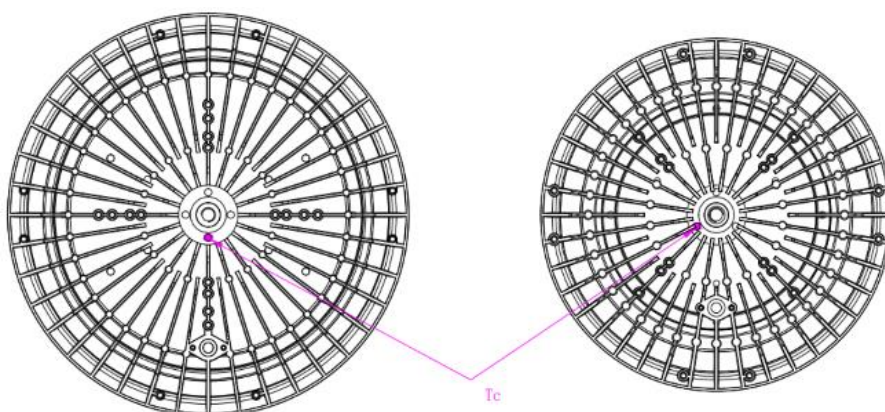
- ★ The LED module itself and all its components may not be mechanical stressed.
- ★ Assembly must not damage or destroy conducting paths on the circuit board.
- ★ To avoid mechanical damage to the connecting cables, the module should be attached securely to the fixture. Heavy vibration should be avoided.
- ★ 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 lightening 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-E 180

GL-HO-E 80/120/150



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