

MechaTronix *in* LED

– ACCESSORIES –

ModuLED Giga-HBG High Bay LED Cooler ø152mm with driver connection system



Product Details

Model n°	 ModuLED Giga 152100-HBG	 ModuLED Giga 152150-HBG
Dimension (mm) ^{*1}	ø152 x h100	ø152 x h150
Volume (mm ³)	566553	857898
Cooling Surface (mm ²)	363547	541592
Weight (gr)	1530	2316
Thermal Resistance (°C/W) ^{*2}	0.52	0.46
Power Pd (W) ^{*3}	95	110
Heat Sink Material	AL6063-T5	AL6063-T5

^{*1} 3D files are available in ParaSolid, STP and IGS on request

^{*2} The thermal resistance Rth is determined with a calibrated heat source of 30mm x 30mm central placed on the heat sink, Tamb 40° and an open environment. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C
The thermal resistance of a LED cooler is not a fix value and will vary with the applied dissipated power Pd

^{*3} Dissipated power Pd. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C
The maximal dissipated power needs to be verified in function of required case temperature Tc or junction temperature Tj and related to the estimated ambient temperature where the light fixture will be placed
Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module

To calculate the dissipated power please use the following formula: $Pd = Pe \times (1 - \eta_L)$

Pd - Dissipated power

Pe - Electrical power

η_L = Light efficiency of the LED module

Notes:

- MechaTronix reserves the right to change products or specifications without prior notice.
- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MechaTronix.

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Mounting Instruction

External driver box connection option



MechaTronix was formed in 2007, comprised of five already successful manufacturing companies, with each of them in excess of a decade of continuous operation. MechaTronix provides a wide variety of mechanical and electromechanical parts as well as assemblies for the international Original Equipment Manufacturers market.

Mounting indicator marks overview

The CoolBox driver box design keeps automatically the necessary space towards the LED cooler, so free air convection will not be blocked - no extra spacer needed.



MechaTronix driver box

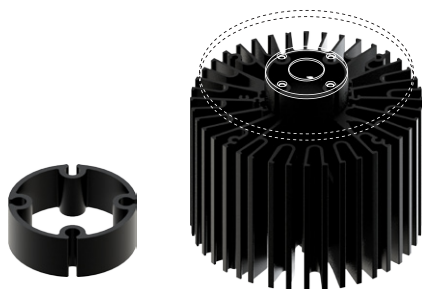
This universal driver box is designed in this way that almost all drivers available in the market up to 160 Watt can be mounted inside without the need of drilling or mechanical adaptations. The universal drivers clamping fixation also creates the perfect locking of your driver towards the top shell, so conduction can easily occur and convection towards the outside will guarantee the driver to keep within temperature specs.

Model Names

- CoolBox
Universal driver box for ModuLED and CoolBay® high bay LED coolers

Mounting

- Direct mounting on the LED cooler with 4 screws M5 x 10mm
Orange indicator marks



MechaTronix driver box connector ring

The driver box connector ring guarantees you the ideal space between the ModuLED LED cooler and your external driver box. With its open structure and aluminium conductivity, this is the ideal bridge between any driver box in the market and our high bay coolers.

Model Names

- Driver box connector ring

Mounting

- Direct mounting on the LED cooler with 4 screws M5 x 30mm
Orange indicator marks

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Mounting Instruction

MechaTronix High Bay LED accessories



With regards to reflectors we have equipped our high bay with the most common high bay reflector standard, the 143mm pitch. For the lenses the standard mounting pattern is foreseen for all 100mm lenses with or without rubber gasket.

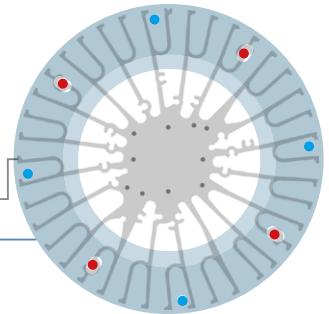
Although we don't produce our own lenses and reflectors, we keep a limited number of models from stock available for your urgent needs.

Below you can find an overview of these models as well as the mounting patterns which go along.

Mounting indicator marks overview

ModuLED Giga

Optics adaptor



Adaptor plate for connection of reflector & lens

With the ModuLED Giga optics adaptor you get an unprecedented flexibility in choices of optics. Equipping your high bays with a wide variety of reflectors in metal or plastic, adding lenses for a controlled light image,... it all becomes plug-and-play.

Model Names

- ModuLED Giga optics adaptor

Mounting

- Direct mounting on the LED cooler with 4 screws M5 x 6mm
- Red indicator marks

CoolBay® Lens

A wide variety of diameter 100mm lenses made out of glass with beam angles 60 degrees, 90 degrees or 120 degrees - Comes together with a high quality rubber gasket. Plastic varieties in clear and milk colored are also available on request.

Model names

- CoolBay® Lens 60
- CoolBay® Lens 90
- CoolBay® Lens 120

Mounting

- With optics adaptor + (4x) screws M5 x 6mm
- Red indicator marks



Dust Protection Plate

When you are using lenses on the ModuLED high bay coolers, the open structure of the cooling fins might lead to dust accumulation in the lens. To avoid this MechaTronix has developed a range of dust protection plates (DPP) which go along with various COB sizes and LED holders. This option is of course not needed when you equip your high bay with a reflector only.

Example DPP-Giga-2828 :

28mm x 28mm COB, Cable hole position for HBG-160 LED driver

DPP-Giga- **1**

1 COB dimension (mm)

Model Names

- DPP-Giga-2828
- DPP-Giga-3838
- DPP-Giga-ZHAGA3

Mounting

- Direct mounting on the LED cooler with 4 screws M5 x 6mm
- Red indicator marks

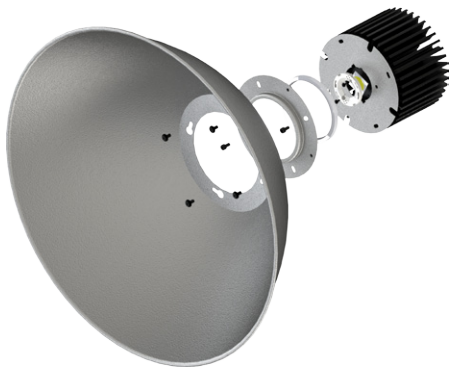
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Mounting Instruction



CoolBay® Reflector

A limited range of high-end off-the-shelf available high bay reflectors in high transfective coated aluminium or polycarbonate. All our reflectors follow the most common mounting standard with a pitch of 143mm and can be fixed with the ModuLED Giga optics adaptor towards the LED cooler. All our reflectors are transported in a special adapted packaging for damage prevention.

Model names

- CoolBay® Reflector 45
- CoolBay® Reflector 45 PC
- CoolBay® Reflector 90
- CoolBay® Reflector 120

Mounting

- Direct mounting on optics adaptor with 4 screws M5 x 6mm
Blue indicator marks