

# MechaTronix in LED

## MechaTronix expands LED high bay cooler program

[Read news online](#)

[Request info or sample](#)

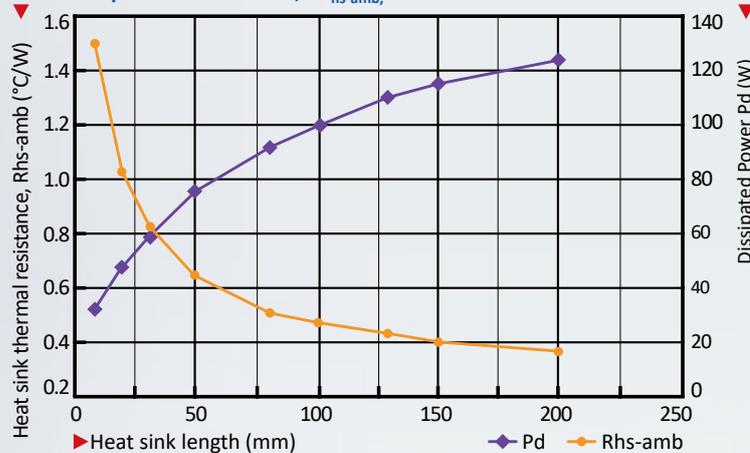
[Visit our website](#)

Many tier A LED brands like Cree, Citizen and Tridonic have recently boosted their offerings in COB LED packages with new models performing lumen outputs from 10.000 all the way up to 20.000 lumen. As ECO partner of most A LED brands MechaTronix took up the glove to develop a range of high power passive LED coolers.

Five months ago MechaTronix announced their first off-the-shelf high bay LED cooler for designs up to 10.000 lumen with the ModuLED Mega LED heat sink design. Now a second platform of standard LED coolers launches for high bay and industrial LED designs up to 15.000 lumen.

The ModuLED Giga is a passive high bay LED cooler in a diameter of 152mm and height 150mm with an optimal thermal performance of 0.46°C/W. In this compact dimensions 100W of dissipated power, equivalent to 150W electrical power, would lead to a temperature rise of 40°C over the ambient temperature.

ModuLED Giga performance data at a heat sink to ambient temperature difference,  $\Delta T_{hs-amb}$ , of 50 °C



ModuLED Giga 152100-HBG



ModuLED Giga 152150-HBG with Highbay accessories

The modular design of the ModuLED Giga allows direct mounting of a wide variety of LED modules direct on the LED cooler, without the need of extra drilling and tapping. Most suitable LED engines for high bay designs over 10.000 lumen like the Cree CXA3070 or CXA3590, Citizen Citiled CLU56 third generation, Edison Edipower III HM high power or Tridonic Talexx Stark FLE can be fixed immediately to the ModuLED Giga. Besides modularity on use of LED modules, also on driver and optics flexibility the ModuLED Giga is one-of-a-kind. Creating a flush-look with using the Mean Well HBG-160 high bay led driver on the top, or adding an external driver box for your other driver of choice, it is all standard foreseen.

# MechaTronix in LED



▲ Meanwell HBG-160 LED driver with Mechatronix HBG-160 Connector set



▲ LED driver with driver box

Optics wise MechaTronix has developed standard optic adaptors which allow immediate implementation of a variety of lenses and reflectors. On the same optic adaptor a wide score of lenses as well as reflectors in aluminium and polycarbonate can be mounted. Design wise MechaTronix has follow here the most common industrial standards one available optics for high bays.

 <p><b>CoolBay® Lens 60</b> High Bay lens set with beam angle 60°, glass high bay lens</p>	 <p><b>CoolBay® Reflector 45</b> Higy Bay reflector set 16"with beam angle 45°, aluminium reflector</p>
 <p><b>CoolBay® Lens 90</b> High Bay lens set with beam angle 90°, glass high bay lens</p>	 <p><b>CoolBay® Reflector 90</b> Higy Bay reflector set 20"with beam angle 90°, aluminium reflector</p>
 <p><b>CoolBay® Lens 120</b> High Bay lens set with beam angle 120°, glass high bay lens</p>	 <p><b>CoolBay® Reflector 120</b> Higy Bay reflector set 20"with beam angle120°, aluminium reflector</p>

Since thermal validation in this extreme high power range is primordial, MechaTronix performs extended lab tests with combination of each high power COB package in combination with the LED cooler and publishes these results per brand in a thermal compatibility matrix. Small variations like size of the board, pressure of the fixation from the board to the LED cooler, internal junction to case thermal resistance and the use of perfect thermal interface material have such a big thermal impact in this extreme power designs, that MechaTronix advices to ask for consultancy in case of new designs.

## ABOUT MECHATRONIX

MechaTronix was founded as a creative designer & manufacturer of high end mechanical plastic & metal parts. With its Asia-based headquarters in Kaohsiung Taiwan, MechaTronix became a powerhouse at designing and manufacturing heat sinks and thermal solutions for OEM and LED lighting applications. Strategic partnerships with major LED manufacturers and sharing our thermal knowledge with their luminaire designers are our core missions. Simple passive cooling, advanced heat pipe technology or active cooling solutions? MechaTronix offers of the shelf and tailored solutions to its worldwide professional customer base. For more information about the company, please visit : [www.mechatronix-asia.com](http://www.mechatronix-asia.com)