

#### An introduction

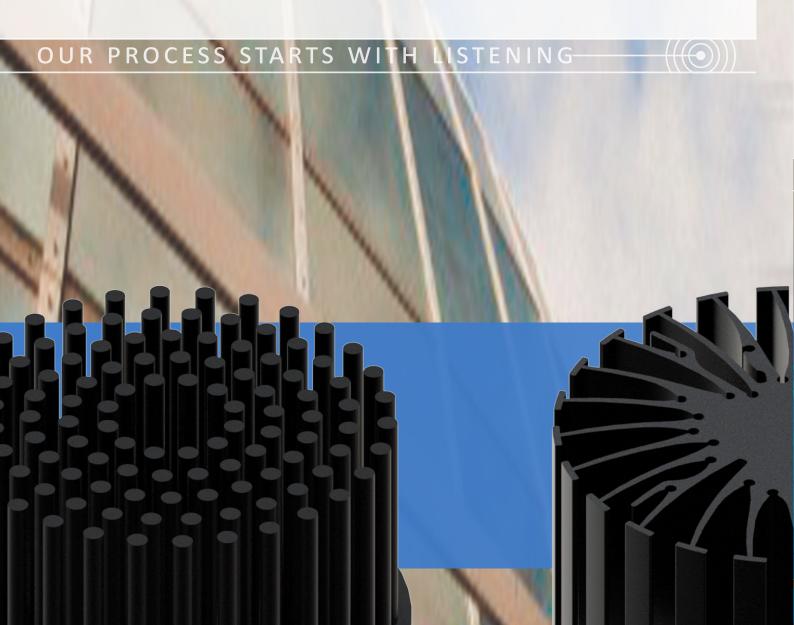
MechaTronix was formed in 2007, comprised of five already successful manufacturing companies, with each of them in excess of a decade of continuous operation. MechaTronix provides a wide variety of mechanical and electromechanical parts as well as assemblies for the international Original Equipment Manufacturers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

Starting off with the production of metal and plastic enclosures for electronic applications and the assembly of half-products and elaborate cables, MechaTronix utilised several production processes, amongst which die casting, forging, extrusion and plastic injection.

The application of secondary processes such as CNC grinding and cutting and finishing such as anodising, painting and silk screen printing enable us to offer a very high degree of customisation and personalisation to our customers.

It was through the expertise in these processes that MechaTronix found its stride as a serious contender in the market of heat sinks and cooling engines. What started as a one-off venture into the extrusion of aluminium heat sinks resulted in a very comprehensive package of cooling solutions for the booming international LED market.

Nowadays, MechaTronix is the preferred cooling partner for world leading LED manufacturers like Tridonic, with an offering of heat sinks and cooling solutions for every conceivable LED application. To service the international markets and meet the exploding demand for its products, MechaTronix formed an international distribution group. Through these localised professional partners, MechaTronix' products are readily available all over the world.



## Mastering LED Cooling

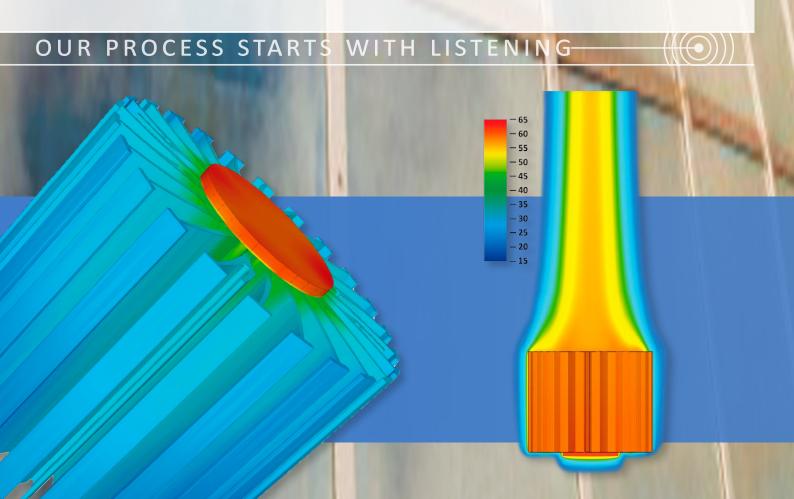
With the evolution of LED lighting over the last years, the demand for professional thermal solutions has grown exponentially. And now that we no longer remain in the realm of low power LED's, thermal management becomes a critical factor within LED fixtures. To that end, MechaTronix has developed several series of pin-fin and star heat sinks, manufactured through die casting, forging or extrusion. This has resulted in a comprehensive range of more than 400 off-the-shelf available LED coolers, for passive or active heat dissipation.

After initial reservations concerning active LED coolers, specialists have found that there really is no better option, when closing in on the 8000 lumen mark. Admittedly, the fan's lifespan becomes somewhat of a focal point in the application of an active LED cooler, but given that the lifespan of the LED engine itself dramatically decreases at high temperatures, the lifespan of the fan looks rather favourable all of a sudden.

MechaTronix' ground breaking ModuLED coolers and its actively cooled sibling IceLED have garnered a lot of attention and positive reviews in the LED market. ModuLED and IceLED are just precursors of a complete range of dedicated and highly effective LED coolers for professional deployment in spotlights, downlights, high bays and a further score of architectural and utility LED applications.

Both ModuLED and IceLED, as well as their upcoming descendants are Zhaga-ready and have a matrix of mounting holes that allows for very easy attachment of a great number of various Tridonic LED modules. Simply apply a thermal interface of your choice, put the LED engine in place and fasten with self-tapping screws and you are good to go! No drilling, customisation or special mounting brackets are needed.

Thanks to an extremely thorough thermal verification of all heat sink lines, MechaTronix provides total thermal disclosure for each model, coupled with all Tridonic Talexx Stark LED COB's and engines. All thermal data is available in the product specifications, that come with every MechaTronix heat sink. In this way, engineers save time and effort during the design stage of their LED fixture and will significantly shorten their time to market.



#### About Tridonic - Talexx

Light is not always the same. You can choose how yours looks. And we'll help you do just that. With our TALEXX LED products we give you the confidence that your chosen lighting solution will give you precisely the results you want.

Thanks to our many years of experience in product development we have been able to raise the quality of light from our LEDs to new levels. Precision is important to us. The production series have an exceptionally constant light colour so they guarantee a uniform and crystal clear colour appearance. In addition to high efficiency and a balanced distribution of light we offer you impressive robustness in the latest generation of our products- and the resultant long life will save you maintenance and repair costs. Compared with conventional light sources, our LEDs make a significant contribution to energy efficiency. And we have given all this a name: TALEXX.

With TALEXX LED products you can tackle any project in complete confidence thanks not only to protected patents but also to stringent checks at all stages of manufacture to guarantee optimum product quality.

And there are more than 250 development engineers working for you to create the products of tomorrow.

With Tridonic you can also be certain that you will find precisely the solutions that you need, both now and in the future.



# **TRIDONIC LED COOLING**

TALEXXmodule DLE series LED modules GEN2 Classic / Integrated & GEN3 Excite / Advanced



### **ModuLED Micro 8630**

Tridonic Modular LED Star cooler Ø86mm - h30mm - Rth 1.8°C/W Cooling performance 1,200 - 3,800 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>✓</b>		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV



#### **ModuLED Micro 8650**

Tridonic Modular LED Star cooler Ø86mm - h50mm - Rth 1.5°C/W Cooling performance 1,500 - 4,500 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>✓</b>		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV



## **ModuLED Micro 8680**

Tridonic Modular LED Star cooler Ø86mm - h80mm - Rth 1.2°C/W Cooling performance 1,800 - 5,500 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>▽</b>		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV



## **ModuLED Mega 13420**

Tridonic Modular LED Star cooler ø134mm - h20mm - Rth 1.32°C/W Cooling performance 1,600 - 5,000 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>▽</b>		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV



# **ModuLED Mega 13450**

Tridonic Modular LED Star cooler ø134mm - h50mm - Rth 0.88°C/W Cooling performance 2,400 - 7,300 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>V</b>		Gen2 Classic, G2-LES-65 AC
✓		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV



# **ModuLED Giga 15220**

Tridonic Modular LED Star cooler ø152mm - h20mm - Rth 1.17°C/W Cooling performance 1,900 - 5,700 lm

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Zhaga holder	TALEXXmodule DLE LED	
	Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV	
	Zhaga nolder	



## **ModuLED Giga 15250**

Tridonic Modular LED Star cooler ø152mm - h50mm - Rth 0.7°C/W Cooling performance 3,000 - 9,000 lm

Direct mount	Zhaga holder	TALEXXmodule DLE LED
<b>✓</b>		Gen2 Classic, G2-LES-65 AC Gen3 65mm EXC/ADV

