

#### An introduction

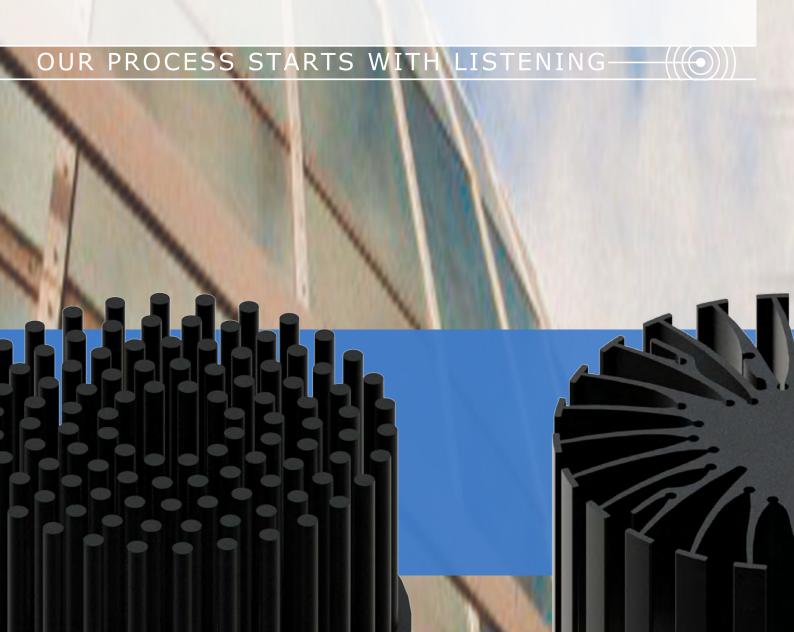
MechaTronix was formed in 2007, comprised of five already successful manufacturing companies, with each of them in excess of a decade of continuous operation. MechaTronix provides a wide variety of mechanical and electromechanical parts as well as assemblies for the international Original Equipment Manufacturers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

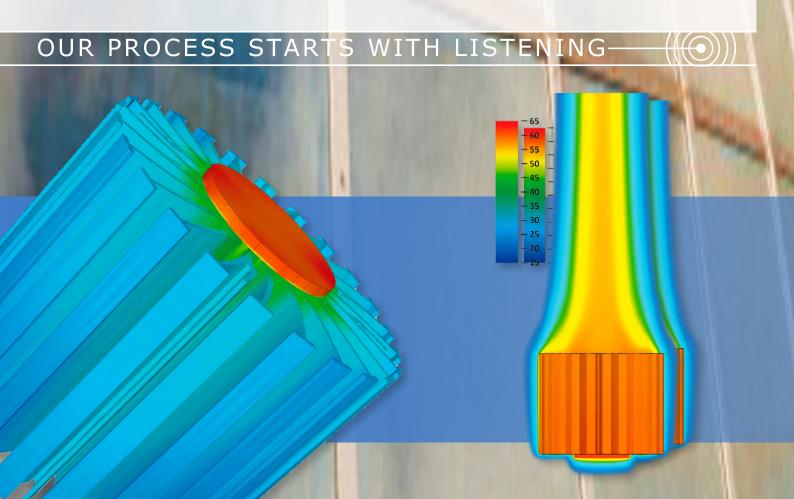
With the evolution of LED lighting over the last years, the demand for professional thermal solutions has grown exponentially. And now that we no longer remain in the realm of low power LED's, thermal management becomes a critical factor within LED fixtures. To that end, MechaTronix has developed several 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 LG Innotek 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 LG Innotek 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.



# LG INNOTEK LED COOLING

For LG Innotek COB LED series

LEMWM18 10W, 13W, 17W, 24W, LEMWM28 40W, Eagle Eye LED Modules

#### LPF4768-ZHP



LG Innotek LED Pin Fin cooler Ø47mm - h68mm - Rth 3.9°C/W Cooling performance 1,300 - 2,500 lm

Direct mount	Zhaga holder	LG Innotek LED COB
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# LEMWM18 10W / 13W / 17W

#### LPF6050-ZHC



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Direct | Zhaga | LG Innotek LED COB

LEMWM18 10W / 13W / 17W

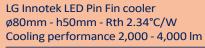
#### LPF6768-ZHP



LG Innotek LED Pin Fin cooler Ø67mm - h68mm - Rth 2.1°C/W Cooling performance 2,300 - 4,600 lm

Direct mount	Zhaga holder	LG Innotek LED COB
	✓	LEMWM18 10W / 13W / 17W / 24W

#### LPF8050-ZHC





#### LPF8668-ZHC



LG Innotek LED Pin Fin cooler Ø86mm - h68mm - Rth 1.46°C/W Cooling performance 3,300 - 6,500 lm

Direct mount	Zhaga holder	LG Innotek LED COB
	<b>✓</b>	LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W

# LPF11180-ZHE



LG Innotek LED Pin Fin cooler ø111mm - h80mm - Rth 1.07°C/W Cooling performance 4,800 - 9,600 lm

Direct mount	Zhaga holder	LG Innotek LED COB
	<b>▽</b>	LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W



#### CoolStar® White 4740

LG Innotek Designer LED Star cooler ø47mm - h40mm - Rth 5°C/W Cooling performance 1,000 - 2,000 lm

Direct mount	Zhaga
mount	holde

LG Innotek LED COB

LEMWM18 10W / 13W



#### CoolStar® White 4760

LG Innotek Designer LED Star cooler ø47mm - h60mm - Rth 4.17°C/W Cooling performance 1,200 - 2,400 lm

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Direct Zhaga mount holder LG Innotek LED COB

LEMWM18 10W / 13W / 17W



## CoolStar® White 6730

LG Innotek Designer LED Star cooler ø67mm - h30mm - Rth 3.13°C/W Cooling performance 1,600 - 3,100 lm

Direct | Zhaga | LG Innotek LED COB |

✓

LEMWM18 10W / 13W / 17W



### CoolStar® White 6760

LG Innotek Designer LED Star cooler ø67mm - h60mm - Rth 2.27°C/W Cooling performance 2,100 - 4,200 lm

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Direct | Zhaga | LG Innotek LED COB

LEMWM18 10W / 13W / 17W / 24W



#### CoolStar® White 8630

LG Innotek Designer LED Star cooler ø86mm - h30mm - Rth 2.08°C/W Cooling performance 2,300 - 4,600 lm

Direct Zhaga mount holder

LG Innotek LED COB

LEMWM18 10W / 13W / 17W / 24W



#### CoolStar® White 8660

LG Innotek Designer LED Star cooler ø86mm - h60mm - Rth 1.56°C/W Cooling performance 3,100 - 6,100 lm

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Direct Zhaga mount holder LG Innotek LED COB

✓

LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W



#### **ModuLED Pico 4750**

LG Innotek Modular LED Star cooler ø47mm - h50mm - Rth 5.3°C/W Cooling performance 900 - 1,800 lm



Direct | Zhaga | LG Innotek LED COB |

✓

LEMWM18 10W / 13W



#### **ModuLED Pico 4780**

LG Innotek Modular LED Star cooler ø47mm - h80mm - Rth 4.2°C/W Cooling performance 1,200 - 2,300 lm



Direct Mount | Zhaga holder | LG Innotek LED COB

LEMWM18 10W / 13W / 17W

#### **ModuLED Nano 7050**

LG Innotek Modular LED Star cooler ø70mm - h50mm - Rth 2.2°C/W Cooling performance 2,200 - 4,300 lm

	Direct mount	Zhaga holder	LG Innotek LED CO
	<b>✓</b>	✓	LEMWM18 10W / 13W /

/	LEMWM18 10W /	13W / 17W	/ 24W
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#### **ModuLED Nano 7080**

LG Innotek Modular LED Star cooler ø70mm - h80mm - Rth 1.8°C/W Cooling performance 2,700 - 5,300 lm

Direct mount	Zhaga holder	LG Innotek LED COB
<b>V</b>	✓	LEMWM18 10W / 13W / 17W / 24W

#### **ModuLED Micro 8650**

LG Innotek Modular LED Star cooler ø86mm - h50mm - Rth 1.5°C/W Cooling performance 3,200 - 6,400 lm

Direct	Zhaga	LG Innotek LEI	COR

V LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W **V** Eagle Eye LED Modules



#### **ModuLED Micro 8680**

LG Innotek Modular LED Star cooler ø86mm - h80mm - Rth 1.2°C/W Cooling performance 4,000 - 8,000 lm

Direct mount	Zhaga holder	aga der LG Innotek LED COB		
<b>✓</b>	<b>✓</b>	LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W		
✓		Eagle Eye LED Modules		



#### **ModuLED 9950**

LG Innotek Modular LED Star cooler ø99mm - h50mm - Rth 1.34°C/W Cooling performance 3,600 - 7,200 lm

Direct Zhaga mount holder			LG Innotek LED COB		
		<b>₹</b>	LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W		



#### **ModuLED 9980**

LG Innotek Modular LED Star cooler ø99mm - h80mm - Rth 1.02°C/W Cooling performance 4,700 - 9,400 lm

Direct mount	Zhaga holder	LG Innotek LED COB	
<b>Z</b>	<b>₹</b>	LEMWM18 10W / 13W / 17W / 24W LEMWM28 40W	



#### **ModuLED Mega 13420**

LG Innotek Modular LED Star cooler ø134mm - h20mm - Rth 1.32°C/W Cooling performance 3,700 - 7,300 lm

Direct	Zhaga	LG Innotek LED	COR
mount	holder	LO ITITOLER LLD	COD

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LEMWM18 17W / 24W LEMWM28 40W



#### **ModuLED Mega 13450-HBG**

LG Innotek High Bay LED cooler with direct mounting holes for Mean Well **HBG** series driver ø134mm - h50mm - Rth 0.88°C/W Cooling performance 5,500 - 11,000 lm

Direct mount	Zhaga holder	LG Innotek LED COB	
▼	<b>✓</b>	LEMWM18 17W / 24W LEMWM28 40W	



## ModuLED Mega 134100-HBG

LG Innotek High Bay LED cooler with direct mounting holes for Mean Well HBG series driver ø134mm - h100mm - Rth 0.67°C/W Cooling performance 7,200 - 14,300 lm

Direct mount	Zhaga holder	LG Innotek LED COB

LEMWM18 24W LEMWM28 40W

## ModuLED Giga 15220

LG Innotek Modular LED Star cooler ø152mm - h20mm - Rth 1.13°C/W Cooling performance 4,300 - 8,500 lm

Direct mount	Zhaga holder	LG Innotek LED COB
-7		LEMWM18 17W / 24W

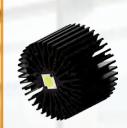


# ModuLED Giga 15250

LG Innotek Modular LED Star cooler ø152mm - h50mm - Rth 0.7°C/W Cooling performance 6,800 - 13,500 lm

Direct	Zhaga	IG	Innotek	LED	COR

LEMWM18 17W / 24W LEMWM28 40W



#### **ModuLED Giga 152100-HBG**

LG Innotek High Bay LED cooler with direct mounting holes for Mean Well HBG series driver

ø152mm - h100mm - Rth 0.52°C/W Cooling performance 9,000 - 18,000 lm

Direct mount	irect   Zhaga   LG Innotek LED COB			
<b>V</b>	<b>₹</b>	LEMWM18 24W LEMWM28 40W		



#### IceLED 550

LG Innotek Modular Active LED cooler ø99mm - h55mm - Rth 0.46°C/W Cooling performance 10,500 - 21,000 lm

Direct mount	Zhaga holder	LG Innotek LED COB
<b>~</b>	<b>▽</b>	LEMWM18 17W / 24W LEMWM28 40W



#### **IceLED Ultra**

LG Innotek Modular Active LED cooler ø99mm - h75mm - Rth 0.25°C/W Cooling performance 19,000 - 38,000 lm

	Cooling performance 19,000 - 38,000 im			
1	Direct mount	Zhaga holder	LG Innotek LED COB	
	✓	<b>V</b>	LEMWM28 40W	

