# **EDISON OPTO LED COOLING** EdiLex, EdiPower II and EdiPower III LED COB's and modules

- Validated Thermal Designs
- Adaptable to your Needs
- Functional & Aesthetic



**DISON** 

## 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 Edison Opto 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 Edison Opto 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.

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# OUR PROCESS STARTS WITH LISTENING-

As offical solution partner of Edison Opto, MechaTronix has developed a unique range of passive and active LED coolers for the Edison Opto COB LED modules.

Edison Opto COB modules distinguish themselves through the combination of high lumen per watt performance combined with a perfect light quality controll.

The MechaTronix LED coolers outstand in design and thermal performance.

Through the ideal balance between conduction, convection and radiation, these designs result in an optimal cooling capacity in minimal dimensions.

### About Edison Opto

As the official cooling partner of Edison Opto, we have made a comprehensive range of LED coolers available, which diversify themselves from all the other products in the market through an ingenious modularity. Edison Opto Edilex SLM Zhaga book 3 LED module for versatile applications like shop lighting, an Edipower II HM COB for high CRI >95 fashion light luminaires, or a Edipower II HV high-voltage COB for AC driverless designs.

# OUR PROCESS STARTS WITH LISTENING-

# **EDISON OPTO LED COOLING** EdiLex, EdiPower II and EdiPower III LED COB's and modules

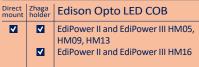
LPF3550-ZHC	LPF4768-ZHP
Edison Opto LED Pin Fin cooler ø35mm - h50mm - Rth 7.41°C/W Cooling performance 700 - 1,300 lm	Edison Opto LED Pin Fin cooler ø47mm - h68mm - Rth 3.9°C/W Cooling performance 1,300 - 2,500 lm
Direct Zhaga mount holder Edison Opto LED COB	Direct Zhaga mount holder Edison Opto LED COB
EdiPower II Star series EdiPower II and EdiPower III HM05, HM09	Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct of the system       Image: Construct of the system         Image: Construct
LPF6050-ZHC	LPF6768-ZHP
Edison Opto LED Pin Fin cooler ø60mm - h50mm - Rth 4.0°C/W Cooling performance 1,200 - 2,300 lm	Edison Opto LED Pin Fin cooler ø67mm - h68mm - Rth 2.1°C/W Cooling performance 2,300 - 4,600 lm
Direct Zhaga holder Edison Opto LED COB	Direct Zhaga mount holder Edison Opto LED COB
<ul> <li>EdiPower II Star series</li> <li>EdiPower II and EdiPower III HM05, HM09, HM13</li> <li>EdiPower II and EdiPower III HM16, HM24, HM30</li> <li>EdiLex Spot Light Module (SLM) 9W,</li> </ul>	<ul> <li>EdiPower II and EdiPower III HM09, HM13</li> <li>EdiPower II and EdiPower III HM16, HM24, HM30</li> <li>EdiLex Spot Light Module (SLM) 9W, 11W, 22W</li> </ul>



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Direct	Zhaga holder	Edison Opto LED COB	
	<ul> <li>✓</li> <li>✓</li> </ul>	EdiPower II and EdiPower III H HM24, HM30 EdiPower II and EdiPower III H EdiLex Spot Light Module (SLI 11W, 22W, 35W	



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



CoolStar<sup>®</sup> White 6760

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

mount	holder	Edison Opto LED COB
		EdiPower II and EdiPower III HM09, HM13
•		EdiPower II and EdiPower III HM16, HM24, HM30

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#### $\checkmark$ EdiPower II and EdiPower III HM16

EdiPower II and EdiPower III HM05,

**Edison Opto LED COB** 

CoolStar<sup>®</sup> White 6730

Edison Opto Designer LED Star cooler

Cooling performance 1,600 - 3,100 lm

ø67mm - h30mm - Rth 3.13°C/W

HM09, HM13

Direct Zhaga mount holder

 $\checkmark$ 

✓

 $\checkmark$ 

CoolStar<sup>®</sup> White 8630

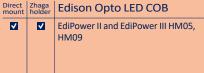
Edison Opto Designer LED Star cooler ø86mm - h30mm - Rth 2.08°C/W Cooling performance 2,300 - 4,600 lm

#### Direct Zhaga mount holder **Edison Opto LED COB**

EdiPower II and EdiPower III HM13 EdiPower II and EdiPower III HM16,  $\checkmark$ HM24, HM30



**Edison Opto LED COB** 







Power III HM16,

Power III HM40 1odule (SLM) 9W,

Edison Opto LED Pin Fin cooler





### **CoolStar® White 8660**

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

Direct Zhaga holder Edison Opto LED COB

✓

EdiPower II and EdiPower III HM16, HM24, HM30



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### **ModuLED Pico 4750**

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

rect ount	Zhaga holder	Edison Opto LED COB
✓ ✓		EdiPower II Star series EdiPower II and EdiPower III HM05, HM09, HM13
✓ ✓		EdiPower II and EdiPower III HM16 EdiLex Spot Light Module (SLM) 9W, 11V



### ModuLED Pico 4780

Edison Opto Modular LED Star cooler Ø47mm - h80mm - Rth 4.2°C/W Cooling performance 1,200 - 2,300 lm

Direct mount	Zhaga holder	Edison Opto LED COB
<b>V</b>		EdiPower II Star series
<b>V</b>	<b>V</b>	EdiPower II Star series EdiPower II and EdiPower III HM05,
		HM09, HM13
<b>V</b>	<b>V</b>	HM09, HM13 EdiPower II and EdiPower III HM16,
		HM24
<b>V</b>		EdiLex Spot Light Module (SLM) 9W, 11



## ModuLED Nano 7050

Edison Opto Modular LED Star cooler Ø70mm - h50mm - Rth 2.2°C/W Cooling performance 2,200 - 4,300 lm

Direct mount	nount Ange Edison Opto LED COB	
<b>V</b>		EdiPower II Star series
<ul><li>✓</li></ul>	<b>V</b>	EdiPower II and EdiPower III HM09,
		HM13
<ul><li>✓</li></ul>	<b>V</b>	EdiPower II and EdiPower III HM16,
		HM24, HM30
<b>V</b>		EdiLex Spot Light Module (SLM) 9W,
		11W, 22W

### ModuLED Nano 7080

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

Direct mount	Zhaga holder	Edison Opto LED COB
<ul><li>✓</li><li>✓</li></ul>		EdiPower II Star series EdiPower II and EdiPower III HM09,
		HM13 EdiPower II and EdiPower III HM16,
		HM24, HM30

EdiLex Spot Light Module (SLM) 9W, 11W, 22W, 35W



## **ModuLED Micro 8650**

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

Direct mount	Zhaga holder	Edison Opto LED COB
<b>V</b>		EdiPower II Star series
<b>V</b>	<b>V</b>	EdiPower II and EdiPower III HM09,
		HM13
<b>V</b>	<b>V</b>	EdiPower II and EdiPower III HM16,
		HM24, HM30
<ul><li>✓</li></ul>		EdiLex Spot Light Module (SLM) 9W,
		11W, 22W, 35W

### ModuLED Micro 8680

Edison Opto Modular LED Star cooler ø86mm - h80mm - Rth 1.2°C/W Cooling performance 4,000 - 8,000 Im

Direct mount	Zhaga holder	Edison Opto LED COB
<		EdiPower II and EdiPower III HM09, HM13
		EdiPower II and EdiPower III HM16, HM24, HM30
		HM24, HM30 EdiPower II and EdiPower III HM40 EdiLex Spot Light Module (SLM) 11W, 22W, 35W



ModuLED 9950

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

Direct Zhaga mount holder		Edison Opto LED COB
		EdiPower II and EdiPower III HM16, HM24, HM30
<b>√</b>		EdiPower II and EdiPower III HM40 EdiLex Spot Light Module (SLM) 9W, 11W, 22W, 35W





### ModuLED Mega 134100-HBG

Edison Opto 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 Zhaga Edison Opto LED COB

mount	noidei	
<b>V</b>	<b>V</b>	EdiPowe
<ul><li>✓</li></ul>	<b>V</b>	EdiPowe
<		EdiPowe
<		EdiLex S

#### er II and EdiPower III HM30 er II and EdiPower III HM40 er III HM High Power 120W

pot Light Module (SLM) 35W

# ModuLED Giga 15250

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



EdiLex Spot Light Module (SLM) 22W, 35W/



#### ModuLED Mega 13450-HBG Edison Opto 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 Zhaga Edison Opto LED COB

✓	<b>V</b>	EdiPower II and EdiPower III HM24,
		HM30
✓	<ul><li>✓</li></ul>	EdiPower II and EdiPower III HM40 EdiLex Spot Light Module (SLM) 22W,
✓		EdiLex Spot Light Module (SLM) 22W,
		35W



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

#### Direct Zhaga **Edison Opto LED COB**

EdiPower II and EdiPower III HM24,  $\checkmark$ HM30

EdiPower II and EdiPower III HM40 **V** EdiLex Spot Light Module (SLM) 22W, 35W

## ModuLED Giga 152100-HBG

Edison Opto 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

nount	holder	Edison Opto LED COB
	<b>V</b>	EdiPower II and EdiPower III HM30
<b>V</b>	<b>V</b>	EdiPower II and EdiPower III HM40
<b>V</b>		EdiPower III HM High Power 120W,
		150W
<b>V</b>		EdiLex Spot Light Module (SLM) 35W







✓

 $\checkmark$ 

## ModuLED Mega 13420

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

### **CoolBay®** Giga-A

Edison Opto High Bay LED cooler with CoolTube® heat tube and direct mounting holes for Mean Well HBG series driver ø152mm - h200mm - Rth 0.34°C/W Cooling performance 14,500 - 29,000 lm

Direct Zhaga holder Edison Opto LED COB  $\checkmark$ 

Edison Opto Modular Active LED cooler

**Edison Opto LED COB** EdiPower II and EdiPower III HM24,

EdiPower II and EdiPower III HM40

EdiPower III HM High Power 120W

EdiLex Spot Light Module (SLM) 22W,

ø99mm - h45mm - Rth 0.58°C/W Cooling performance 8,200 - 16,400 lm

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Direct mount Zhaga holder

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HM30

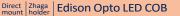
35W

EdiPower III HM High Power 120W, 150W



#### **CoolBay®** Tera-A

Edison Opto High Bay LED cooler with CoolTube<sup>®</sup> heat tube and direct mounting holes for Mean Well HBG series driver ø192mm - h250mm - Rth 0.22°C/W Cooling performance 22,000 - 44,000 lm



✓

EdiPower III HM High Power 150W  $\checkmark$ 

## IceLED 550

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

Direct mount	Zhaga holder	Edison Opto LED COB
		EdiPower II and EdiPower III HM24, HM30
<b>√</b>		EdiPower II and EdiPower III HM40 EdiPower III HM High Power 120W, 150W
		EdiLex Spot Light Module (SLM) 35W



## **IceLED** Ultra

IceLED 450

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

Direct mount	Zhaga holder	Edison Opto LED COB
	▼	EdiPower II and EdiPower III HM24, HM30
<b>V</b>		EdiPower II and EdiPower III HM40 EdiPower III HM High Power 120W, 150W
		EdiLex Spot Light Module (SLM) 35W



## Edison Opto Modular Active LED cooler Direct Zhaga ✓ ✓ ✓

✓ ✓

#### ø99mm - h75mm - Rth 0.26°C/W Cooling performance 14,500 - 29,000 lm Edison Opto LED COB

**IceLED Ultra VS** 

EdiPower II and EdiPower III HM24, HM30 EdiPower II and EdiPower III HM40

EdiPower II HR series 2PHR35 EdiPower II SD series 2PSD40, 2PSD50 EdiLex Spot Light Module (SLM) 35W





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