



CITIZEN LED COOLING

CITILED Version 8, High Intensity Type Version 3
& Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058,
CLU550, CLU7B2/7A2/702/712
CLU028-0604C4, CLU04H, CLU05H

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

CITIZEN
Micro HumanTech

MTx
MechaTronix

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.

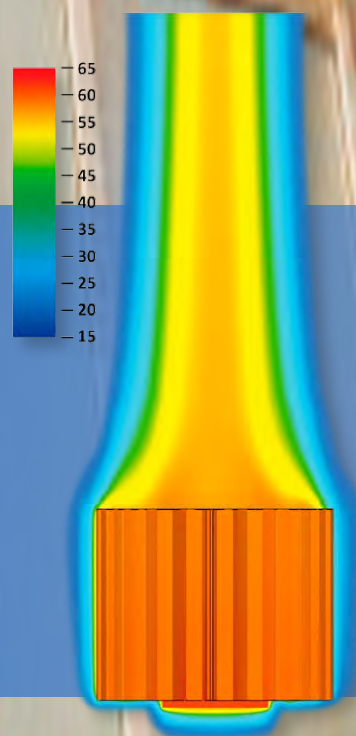
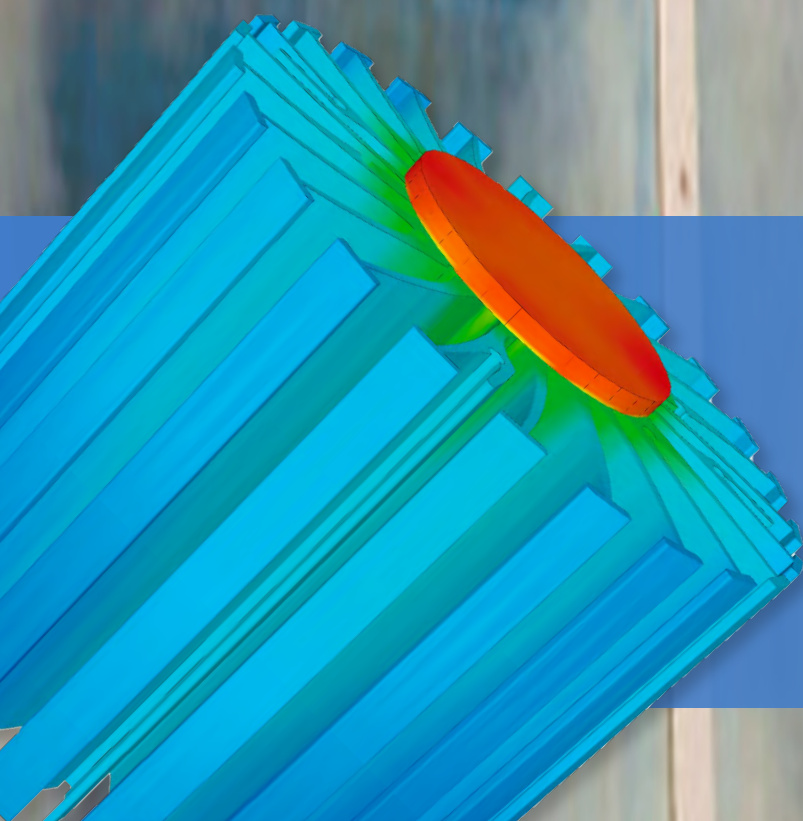
After initial reservations concerning active LED coolers, specialists have found that there really is no better option, when closing in on the 8000 lumen mark. Admittedly, the fan's lifespan becomes somewhat of a focal point in the application of an active LED cooler, but given that the lifespan of the 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 Citizen 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 Citizen CITED 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.

OUR PROCESS STARTS WITH LISTENING



CITIZEN LED COOLING

CITILED Ver. 8, High Intensity Type Ver. 3 & Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058, CLU550,
CLU7B2/7A2/702/712, CLU028-0604C4, CLU04H, CLU05H

LPF3550-ZHC



Citizen CITILED LED Pin Fin cooler
ø35mm - h50mm - Rth 7.41°C/W
Cooling performance 700 - 1,300 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU7B2, CLU7A2

LPF4768-ZHP



Citizen CITILED LED Pin Fin cooler
ø47mm - h68mm - Rth 3.9°C/W
Cooling performance 1,300 - 2,500 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
	✓	CLU028, CLU02J
	✓	CLU038, CLU03J
	✓	CLU7A2, CLU702

LPF6050-ZHC



Citizen CITILED LED Pin Fin cooler
ø60mm - h50mm - Rth 4.0°C/W
Cooling performance 1,200 - 2,300 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
	✓	CLU038, CLU03J
✓	✓	CLU7A2, CLU702

LPF6768-ZHP



Citizen CITILED LED Pin Fin cooler
ø67mm - h68mm - Rth 2.1°C/W
Cooling performance 2,300 - 4,600 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
	✓	CLU028, CLU02J
	✓	CLU038, CLU03J
	✓	CLU04J
	✓	CLU702
	✓	CLU712

LPF8050-ZHC



Citizen CITILED LED Pin Fin cooler
ø80mm - h50mm - Rth 2.34°C/W
Cooling performance 2,000 - 4,000 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
	✓	CLU02J
✓	✓	CLU038, CLU03J
	✓	CLU7A2, CLU702
✓	✓	CLU712

LPF8668-ZHC



Citizen CITILED LED Pin Fin cooler
ø86mm - h68mm - Rth 1.46°C/W
Cooling performance 3,300 - 6,500 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

LPF11180-ZHE



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
	✓	CLU038, CLU03J
	✓	CLU048, CLU04J
	✓	CLU712

CITIZEN LED COOLING

CITILED Ver. 8, High Intensity Type Ver. 3 & Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058, CLU550,
CLU7B2/7A2/702/712, CLU028-0604C4, CLU04H, CLU05H

CoolStar® 4740



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU7B2, CLU7A2, CLU702

CoolStar® 4760



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU7B2, CLU7A2, CLU702

CoolStar® 6730



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU7A2, CLU702

CoolStar® 6760



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU7A2, CLU702
✓	✓	CLU712

CoolStar® 8630



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU702
✓	✓	CLU712

CoolStar® 8660



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED Pico 4750



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU7B2, CLU7A2, CLU702

ModuLED Pico 4780



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU7A2, CLU702

CITIZEN LED COOLING

CITILED Ver. 8, High Intensity Type Ver. 3 & Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058, CLU550,
CLU7B2/7A2/702/712, CLU028-0604C4, CLU04H, CLU05H

ModuLED Nano 7050

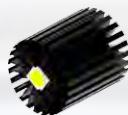
Citizen CITILED Modular LED Star cooler
ø70mm - h50mm - Rth 2.2°C/W
Cooling performance 2,200 - 4,300 lm



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU04J
✓	✓	CLU702
✓	✓	CLU712

ModuLED Nano 7080

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



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028, CLU02J
✓	✓	CLU038, CLU03J
✓	✓	CLU04J
✓	✓	CLU702
✓	✓	CLU712

ModuLED Micro 8630

Citizen CITILED Modular LED Star cooler
ø86mm - h30mm - Rth 1.8°C/W
Cooling performance 2,700 - 5,300 lm



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED Micro 8650

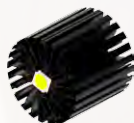
Citizen CITILED Modular LED Star cooler
ø86mm - h50mm - Rth 1.5°C/W
Cooling performance 3,200 - 6,400 lm



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED Micro 8680

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



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU028
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED 9950

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



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED 9980

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



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

ModuLED Mega 13420

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



Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J
✓	✓	CLU712

CITIZEN LED COOLING

CITILED Ver. 8, High Intensity Type Ver. 3 & Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058, CLU550,
CLU7B2/7A2/702/712, CLU028-0604C4, CLU04H, CLU05H

ModuLED Mega 13450-HBG



Citizen CITILED 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	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
✓	✓	CLU048, CLU04J

ModuLED Mega 134100-HBG



Citizen CITILED 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	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J

ModuLED Giga 15220



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038, CLU03J
	✓	CLU048, CLU04J
	✓	CLU712

ModuLED Giga 15250



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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J
		CLU058

ModuLED Giga 152100-HBG



Citizen CITILED 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	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J
		CLU058

ModuLED Giga 152150-HBG



Citizen CITILED High Bay LED cooler with direct mounting holes for Mean Well HBG series driver
ø152mm - h150mm - Rth 0.46°C/W
Cooling performance 10,500 - 21,000 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J
		CLU058

CoolBay® Giga-A



Citizen CITILED 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 mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU048
	✓	CLU058

CoolBay® Giga-B



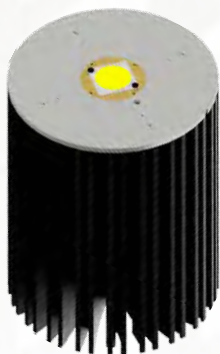
Citizen CITILED High Bay LED cooler with CoolTube® heat tube and direct mounting holes for Mean Well HBG series driver
ø152mm - h200mm - Rth 0.34°C/W
Cooling performance 14,500 - 29,000 lm

Direct mount	Zhaga holder	Citizen CITILED COB
	✓	CLU048
	✓	CLU058

CITIZEN LED COOLING

CITILED Ver. 8, High Intensity Type Ver. 3 & Horticulture series

CLU028/02J, CLU038/03J, CLU048/04J, CLU058, CLU550,
CLU7B2/7A2/702/712, CLU028-0604C4, CLU04H, CLU05H



CoolBay® Tera-A

Citizen CITILED High Bay LED cooler with CoolTube® 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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU048
✓	✓	CLU058
		CLU550



CoolBay® Tera-B

Citizen CITILED High Bay LED cooler with CoolTube® 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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU048
✓	✓	CLU058
		CLU550



CoolBlock® SQ-01 2x2MX

Square Pin Fin LED Cooler for 2x2MX platform. Accommodating LED boards with 4 LEDs of Citizen Citiled CLU028-0604C4 COB by using 2x2MX Bender+Wirth holder and Ledil Strada 2x2MX lenses for IP67 waterproof with just a few screws

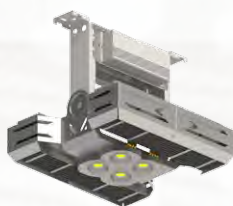
W96mm - L96mm - H61.5mm
Thermal resistance Rth 1.45°C/W
Cooling performance 3,300 - 6,500 lm
Black electro-coating



CoolFin® Giga

Advanced Ultra High power LED cooler with stackfin and heat pipe structure
Accommodating 28x28 LED COB Citizen Citiled CLU048, CLU04J, CLU04H with CoolConnect® holder 2x2HC-01 and 38x38 LED COB Citizen Citiled CLU058, CLU05H with CoolConnect® holder 2x2HC-02 and for multiple brands LED driver & accessories

W468mm - L446mm - H226mm
Thermal resistance Rth 0.1°C/W
Cooling performance 50,000 - 100,000 lm



CoolFin® Giga Tilt

Advanced Ultra High power LED cooler with stackfin and heat pipe structure
Accommodating 28x28 LED COB Citizen Citiled CLU048, CLU04J, CLU04H with CoolConnect® holder 2x2HC-01 and 38x38 LED COB Citizen Citiled CLU058, CLU05H with CoolConnect® holder 2x2HC-02 and for multiple brands LED driver & accessories

W468mm - L446mm - H394mm
Thermal resistance Rth 0.1°C/W
Cooling performance 50,000 - 100,000 lm



IceLED 450

Citizen CITILED Modular Active LED cooler
ø99mm - h45mm - Rth 0.58°C/W
Cooling performance 8,200 - 16,400 lm

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J
✓		CLU058



IceLED 550

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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU038
✓	✓	CLU048, CLU04J
✓		CLU058



IceLED Ultra

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

Direct mount	Zhaga holder	Citizen CITILED LED COB
✓	✓	CLU048
✓		CLU058



Your local distributor:

OUR PROCESS STARTS WITH LISTENING 



No.818, Dashun 2nd Rd., Sanmin Dist.
Tel: +886-7-3815892
led@mechatronix-asia.com

Kaohsiung City 80787 Taiwan
Fax: +886-7-3839293
www.led-heatsink.com