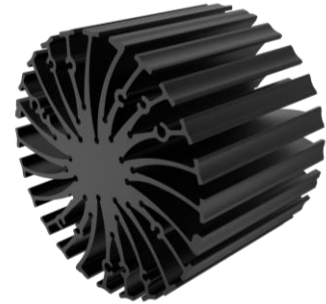


## EtraLED

### EtraLED-LUN-8550 Luminus Modular Passive Star Heat Sink $\Phi$ 85mm

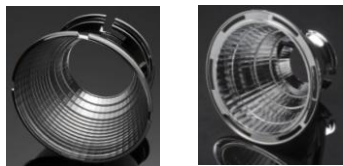
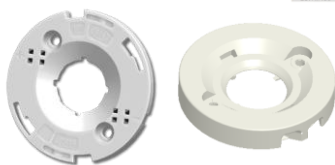
#### Features VS Benefits

- \* The EtraLED-LUN-8550 Luminus Passive Star LED Heat Sinks are specifically designed for luminaires using the Luminus LED engines.
- \* Mechanical compatibility with direct mounting of the LED engines to the LED cooler and thermal performance matching the lumen packages.
- \* For spotlight and downlight designs from 1700 to 4,300 lumen.
- \* Thermal resistance range  $R_{th}$  1.72°C/W.
- \* Modular design with mounting holes foreseen for direct mounting of Luminus COB series.
- \* Diameter 85mm - standard height 50mm, Other heights on request.
- \* Forged from highly conductive aluminum.



#### Zhaga LED engine and radiator assembly is a unified future international standardization

- \* Below you find an overview of Luminus COB's and LED modules which standard fit on the srar LED heat sinks.
- \* In this way mechanical after work and related costs can be avoided, and lighting designers can standardize their designs on a limited number of srar LED heat sinks.



#### Luminus LED Modules directly Mounting Options

##### Luminus COB series.

- CXM-6-AC;
- CIM/CLM/CXM-9 -AC;

With the Zhaga Book 11 holders for the green indicator marks.  
TE Connectivity Holder: 2213678-5;  
BJB Holder: 47.319.6060.50;  
Without the holders for the pink indicator marks.  
Direct mounting with machine screws M3x6.5mm.

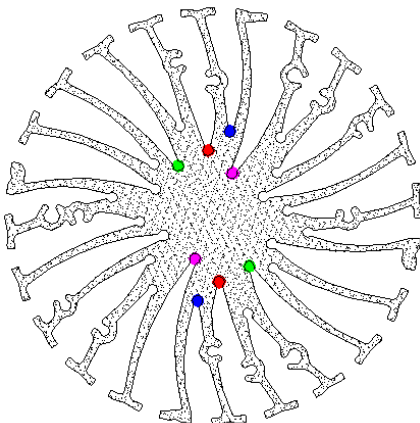
With the LEDiL products:  
Lena series: CN14xxx; C12xxx;  
Lenina series: CN14xxx; C12xxx;

##### Luminus COB series.

- CXM-11-AC;
- CIM/CLM/CXM-14;

With the Zhaga Book 3 holders for the blue indicator marks.  
TE Connectivity Holder: 2213254-1;  
BJB Holder: 47.319.2021.50;  
Without the holders for the red indicator marks.  
Direct mounting with machine screws M3x6.5mm.

With the LEDiL products:  
Lena series: CN12xxx;  
Lenina series: CN12xxx; C12xxx;



# EtraLED

## EtraLED-LUN-8550 Luminus Modular Passive Star Heat Sink $\Phi$ 85mm

### Mounting Options and Drawings & Dimensions

Example: EtraLED-LUN-8550-B-1,2

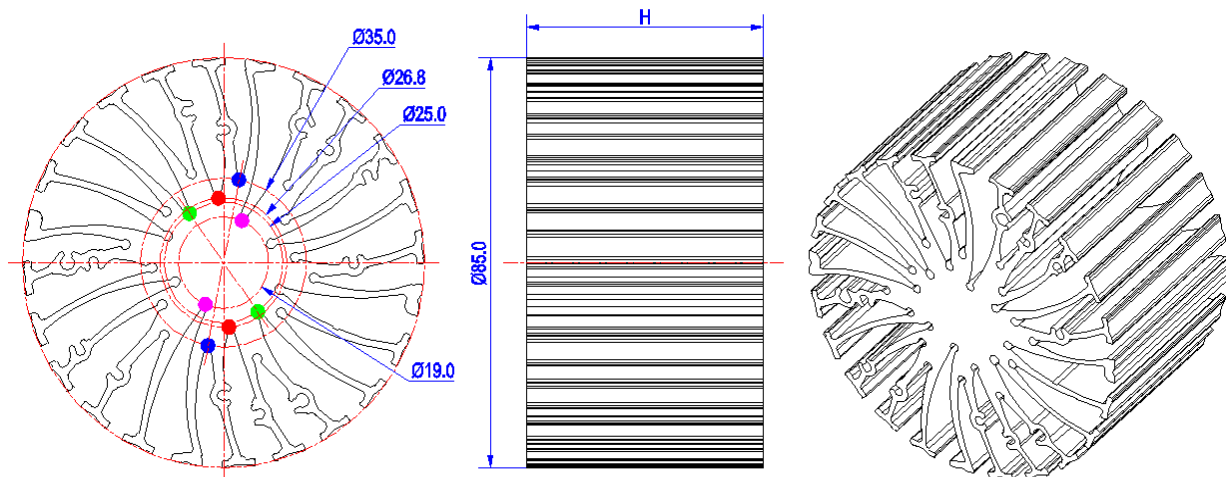
Example: EtraLED-LUN-85 **1** - **2** - **3**

- 1** Height (mm)
- 2** Anodising Color
  - B-Black
  - C-Clear
  - Z-Custom
- 3** Mounting Options - see graphics for details Combinations available
  - Ex.order code - 12
  - means option 1 and 2 combined

#### Notes:

- Mentioned models are an extraction of full product range.
- For specific mechanical adaptations please contact MingfaTech.
- MingfaTech reserves the right to change products or specifications without prior notice.

| MOUNTING OPTION | Module type                      | Holder NO.   | LEDiL products      |                     | THREAD | THREAD DEPTH | THREAD HOLE DISTANCE               |
|-----------------|----------------------------------|--|---------------------|---------------------|--------|--------------|------------------------------------|
|                 |                                  |  | Lenina Series       | Lena series         |        |              |                                    |
| 1               |                                  | /  |                     |                     | M3     | 6.5mm        | 19.0mm/ 2-@180°                    |
| 2               | CXM-6-AC;<br>CIM/ CLM/CXM-9 -AC; | BJB Holder<br>47.319.6060.50<br>TE Holder<br>2213678-5 | CN14xxx;<br>C12xxx; | CN14xxx;<br>C12xxx; | M3     | 6.5mm        | 25.0mm/ 2-@180°<br>(Zhaga book 11) |
| 3               |                                  | /  |                     |                     | M3     | 6.5mm        | 26.8mm/ 2-@180°                    |
| 4               | CXM-11;<br>CIM/CLM/CXM-14        | BJB Holder<br>47.319.2021.50<br>TE Holder<br>2213254-1 | CN12xxx;<br>C12xxx; | CN12xxx;            | M3     | 6.5mm        | 35.0mm/ 2-@180°<br>(Zhaga book 3)  |



**EtraLED**

**EtraLED-LUN-8550 Luminus Modular Passive Star Heat Sink Φ85mm**

**The product data table**

|  |   |                  |
|--|---|------------------|
|  | <b>Model No.</b>                                  | EtraLED-LUN-8550 |
|  | <b>Heatsink Size</b>                              | Φ85xH50mm        |
|  | <b>Heatsink Material</b>                          | AL6063-T5        |
|  | <b>Finish</b>                                     | Black Anodized   |
|  | <b>Weight (g)</b>                                 | 286.0            |
|  | <b>Dissipated power (T<sub>hs-amb</sub>,50°C)</b> | 29.0 (W)         |
|  | <b>Cooling surface area (mm<sup>2</sup>)</b>      | 94366            |
|  | <b>Thermal Resistance (R<sub>hs-amb</sub>)</b>    | 1.72 (°C/W)      |

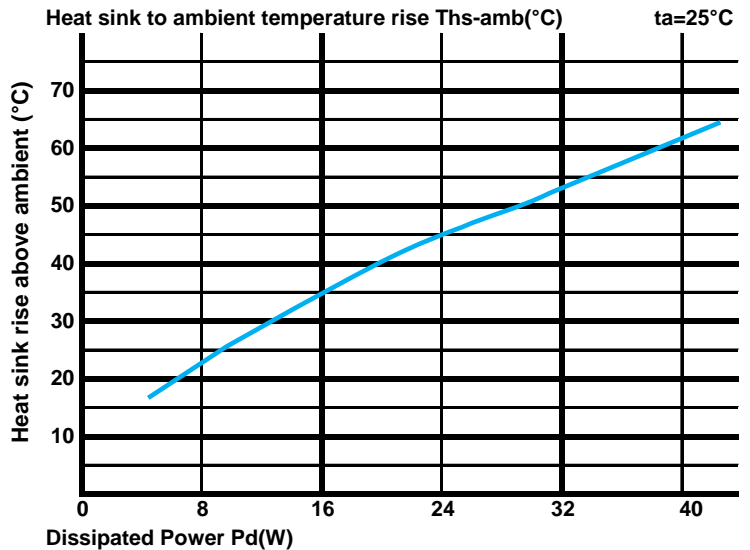
**The thermal data table**

\* Please be aware the dissipated power Pd is not the same as the electrical power Pe of a LED module.

\*To calculate the dissipated power please use the following formula: Pd = Pe x (1-ηL).

Pd - Dissipated power ; Pe - Electrical power ; ηL = Light efficiency of the LED module;

| Dissipated Power Pd(W) | Pd = Pe x (1-ηL) | Heat sink to ambient thermal resistance R <sub>hs-amb</sub> (°C/W) | Heat sink to ambient temperature rise Ths-amb (°C) |
|------------------------|------------------|--|--|
|                        |                  | EtraLED-LUN-8550   |  |
| 8.0                    |                  | 2.88   | 23.0   |
| 16.0                   |                  | 2.19   | 35.0   |
| 24.0                   |                  | 1.88   | 45.0   |
| 32.0                   |                  | 1.66   | 53.0   |
| 40.0                   |                  | 1.53   | 61.0   |



\*The aluminum substrate side of the package outer shell is thermally connected to the heat sink via TIM (Thermal interface material).

MingFa recommends the use of a high thermal conductive interface between the LED module and the LED cooler.

Either thermal grease, A thermal pad or a phase change thermal pad thickness 0.1-0.15mm is recommended.



\*Thermal resistance is a heat property and a measurement of a temperature difference by which an object or material resists a heat flow.

Geometric shapes are different, the thermal resistance is different. Formula:  $\theta = (T_{hs} - T_a) / P_d$

$\theta$  - Thermal Resistance [°C/W];  $T_{hs}$  - Heatsink temperature ;  $T_a$  - Ambient temperature ;

\*The thermal resistance between the junction section of the light-emitting diode and the aluminum substrate side of the package outer shell is  $R_{junction-case}$ , the thermal resistance of the TIM outside the package is  $R_{interface (TIM)}$  [°C/W], the thermal resistance with the heat sink is  $R_{heatsink-ambient}$  [°C/W], and the ambient temperature is  $T_{ambient}$  [°C].

\*Thermal resistances outside the package  $R_{interface (TIM)}$  and  $R_{heatsink-ambient}$  can be integrated into the thermal resistance  $R_{case-ambient}$  at this point. Thus, the following formula is also used:

$$T_{junction} = (R_{junction-case} + R_{case-ambient}) \cdot P_d + T_{ambient}$$