



for

LED

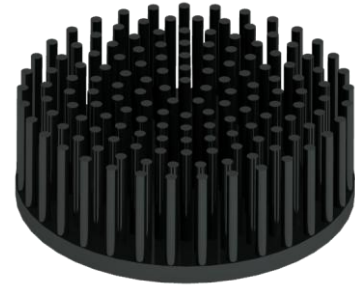


*GooLED*

**GooLED-LUME-8630 Pin Fin Heat Sink  $\Phi$ 86.5mm for Lumens**

**Features VS Benefits**

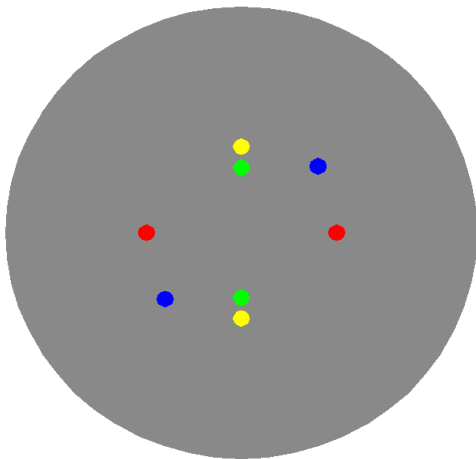
- \* The GooLED-LUME-8630 Lumens Pin Fin LED Heat Sinks are specifically designed for luminaires using the Lumens LED engines.
- \* Mechanical compatibility with direct mounting of the LED engines to the LED cooler and thermal performance matching the lumen packages.
- \* For spotlight and downlight designs from 1,200 to 3,200 lumen.
- \* Thermal resistance range  $R_{th}$  2.5°C/W.
- \* Modular design with mounting holes foreseen for direct mounting of Lumens Ergon COB series, and AC-ALL series LED engines.
- \* Diameter 86.5mm - standard height 30.0mm 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 Lumens COB's and LED modules which standard fit on the Pin Fin 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 LED Pin Fin LED Heat Sink.

**LUMENS**



**Lumens LED Modules directly Mounting Options**

**Lumens Ergon COB\_HO, COB\_HO+, COB\_HE Series :**

- ERC1812xxxxHO; ERC1812xxxxHE;
- ERC1820xxxxHO; ERC1820xxxxHE;

With the Zhaga Book 3 holders for the red indicator marks.  
(Ideal Holder:50-2101CR); (BJB holder:47.319.2131.50);  
Without the holders for the green indicator marks.  
Direct mounting with machine screws M3x6.5mm.

**Lumens Ergon COB\_HO, COB\_HO+, COB\_HE Series :**

- ERC2520xxxxHO; ERC2530xxxxHE;
- ERC2530xxxxHO; ERC2540xxxxHE;
- ERC2540xxxxHO; ERC2530xxxxHO+
- ERC2520xxxxHO+

With the Zhaga Book 3 holders for the red indicator marks.  
(Ideal Holder:50-2102CR); (BJB Holder:47.319.2141.50);  
Without the holders for the yellow indicator marks.  
Direct mounting with machine screws M3x6.5mm.

**Lumens Ergon COB\_HO, COB\_HO+, COB\_HE Series :**

- ERC3050xxxxHO; ERC3050xxxxHE;
- ERC3070xxxxHO; ERC3070xxxxHE;

With the Zhaga Book 3 holders for the green indicator marks.  
(Ideal Holder:50-2234C); (BJB holder:47.319.2151.50);  
Without the holders for the blue indicator marks.  
Direct mounting with machine screws M3x6.5mm.

**Lumens AC-ALL Series :**

- EDC/57C/20W/xxx/120V/B; EDC/57C/20W/xxx/230V/A;
- EDC/57C/30W/xxx/120V/B; EDC/57C/30W/xxx/230V/A;
- EDC/57C/40W/xxx/120V/B; EDC/57C/40W/xxx/230V/A;

With the Zhaga Book 3 holders for the red indicator marks.  
Direct mounting with machine screws M3x6.5mm.  
Please refer to the [www.lumensleds.com](http://www.lumensleds.com) data provided on the manual.



#### Mounting Options and Drawings & Dimensions

Example:GooLED-LUME-8630-B-1,2

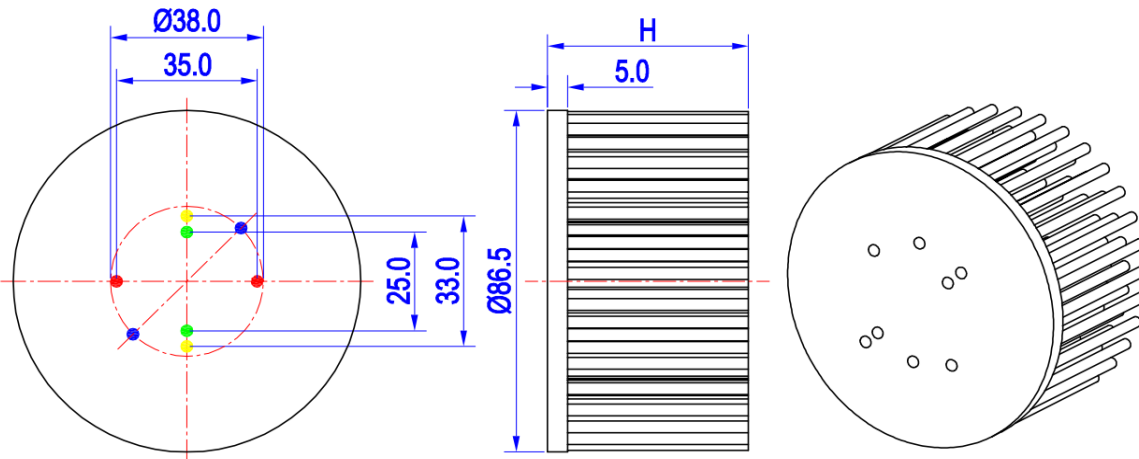
Example:GooLED-LUME-86 **1** - **2** - **3**

- 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.	THREAD	THREAD DEPTH	THREAD HOLE DISTANCE
1	Ergon COB (17.85x17.85)	/	M3	6.5mm	25.0mm/ 2-@180°
2	Ergon COB (23.85x23.85)	/	M3	6.5mm	33.0mm/ 2-@180°
3	AC-ALL Series	Lumens	M3	6.5mm	35.0mm/ 2-@180° (Zhaga book 3)
	Ergon COB (17.85x17.85)	BJB Holder 47.319.2131.50			
		Ideal Holder 50-2101CR			
	Ergon COB (23.85x23.85)	BJB Holder 47.319.2141.50			
		Ideal Holder 50-2102CR			
	Ergon COB (27.35x27.35)	BJB Holder 47.319.2151.50			
Ideal Holder 50-2234CR					
4	/	M3	6.5mm	38.0mm/ 2-@180°	





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GooLED

GooLED-LUME-8630 Pin Fin Heat Sink  $\Phi$ 86.5mm for Lumens

The product data table

	Model No.	GooLED-LUME-8630
	Heatsink Size	$\Phi$ 86.5xH30mm
	Heatsink Material	AL1070
	Finish	Black Anodized
	Weight (g)	152.0
	Dissipated power (T <sub>hs-amb</sub> ,50°C)	20.0 (W)
	Cooling surface area (mm <sup>2</sup> )	48926
	Thermal Resistance (R <sub>hs-amb</sub> )	2.5 (°C/W)

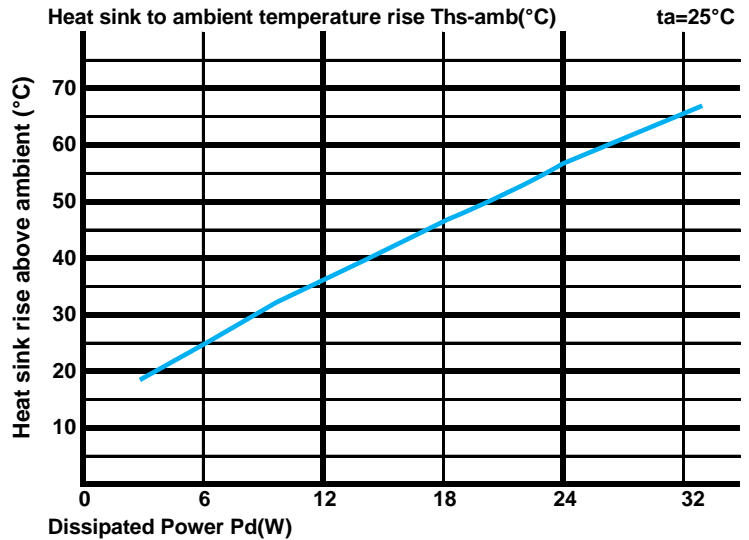
The thermal data table

\* 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;

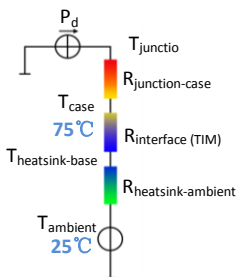
Dissipated Power Pd(W)	Pd = Pe x (1-ηL)	Heat sink to ambient thermal resistance R <sub>hs-amb</sub> (°C/W)	Heat sink to ambient temperature rise T <sub>hs-amb</sub> (°C)
		GooLED-LUME-8630	
6.0		4.00	24.0
12.0		2.92	35.0
18.0		2.56	46.0
24.0		2.33	56.0
32.0		2.03	65.0



\*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<sub>hs</sub> - Heatsink temperature; T<sub>a</sub> - 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<sub>junction-case</sub>, the thermal resistance of the TIM outside the package is R<sub>interface (TIM)</sub> [°C/W], the thermal resistance with the heat sink is R<sub>heatsink-ambient</sub> [°C/W], and the ambient temperature is T<sub>ambient</sub> [°C].

\*Thermal resistances outside the package R<sub>interface (TIM)</sub> and R<sub>heatsink-ambient</sub> can be integrated into the thermal resistance R<sub>case-ambient</sub> at this point. Thus, the following formula is also used:

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

