



for

LED



*GooLED*

**GooLED-EDI-4830 Pin Fin LED Heat Sink  $\Phi$ 48mm for Edison**

**Features VS Benefits**

- \* The GooLED-EDI-4830 Edison Pin Fin LED Heat Sinks are specifically designed for luminaires using the Edison 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 400 to 1,300 lumen.
- \* Thermal resistance range  $R_{th}$  6.25°C/W.
- \* Modular design with mounting holes foreseen for direct mounting of Edison COB series.
- \* Diameter 48.0mm - standard height 30.0mm Other heights on request.
- \* Forged from highly conductive aluminum.

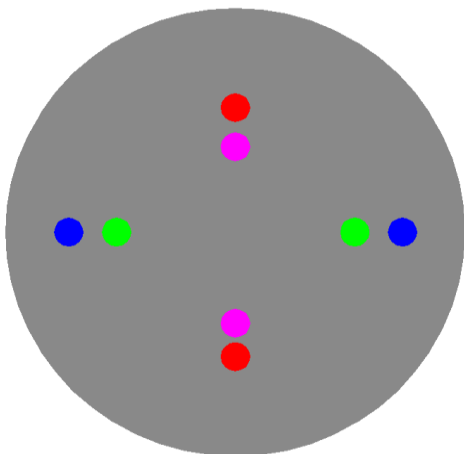


**Zhaga LED engine and radiator assembly is a unified future international standardization**

- \* Below you find an overview of Edison 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.



**STUCCHI**  
A. A. G.  
ideas are made of light



**Edison LED Modules directly Mounting Options**

Edison Opto\_EdiPower® V, III HC, III HE/ CR170/ CR190, III SL Series :

- 2PHE06xxxxP32202;
- 2PHE09xxxxP35202;
- 2PHC09xxxxP32001;
- 2PHE13xxxxP32001;
- 2PSL09xxxxP12010;

With the Zhaga Book 11 holders for the green indicator marks.  
BJB holder: 47.319.6294.50;  
AAG.STUCCHI: 8100-G2  
Without the holders for the pink indicator marks.  
Direct mounting with machine screws M3x6.5mm.

**Edison LED Modules directly Mounting Options**

Edison Opto\_EdiPower® V, III HC, III HE/ CR170/ CR190, III SL Series :

- 2PHE15xxxxP34202;
- 2PHE18xxxxP34202;
- 2PHE24xxxxP34202;
- 2PHE30xxxxP34202;
- 2PHC20xxxxP34001;
- 2PHC30xxxxP34001;
- 2PHE20xxxxP34001;
- 2PHE30xxxxP34001;
- 2PSL30xxxxP13010;

With the Zhaga Book 3 holders for the blue indicator marks.  
BJB holder: 47.319.2021.50;  
AAG.STUCCHI: 8101-G2  
Without the holders for the red indicator marks.  
Direct mounting with machine screws M3x6.5mm.



*GooLED*

**GooLED-EDI-4830 Pin Fin LED Heat Sink  $\Phi$ 48mm for Edison**

### Mounting Options and Drawings & Dimensions

Example:GooLED-EDI-4830-B-1,2

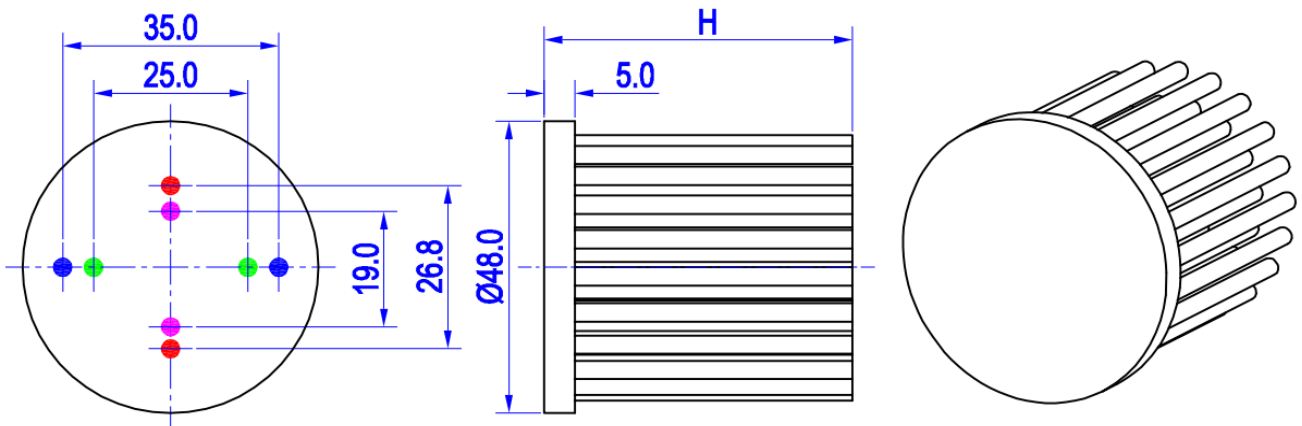
Example:GooLED-EDI-48 **1** - **2** - **3**

- 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	9~13W COB	/	M3	6.5mm	19.0mm/ 2-@180°
2		BJB Holder 47.319.2021.50 AAG.STUCCHI 8101-G2	M3	6.5mm	25.0mm/ 2-@180° (Zhaga book 11)
3	15~30W COB	/	M3	6.5mm	26.8mm/ 2-@180°
4		BJB Holder 47.319.2021.50 AAG.STUCCHI 8101-G2	M3	6.5mm	35.0mm/ 2-@180° (Zhaga book 3)



## GooLED

### GooLED-EDI-4830 Pin Fin LED Heat Sink $\Phi$ 48mm for Edison

#### The product data table

	<b>Model No.</b>	GooLED-EDI-4830
	<b>Heatsink Size</b>	$\Phi$ 48xH30mm
	<b>Heatsink Material</b>	AL1070
	<b>Finish</b>	Black Anodized
	<b>Weight (g)</b>	46.0
	<b>Dissipated power (T<sub>hs-amb</sub>,50°C)</b>	8.0 (W)
	<b>Cooling surface area (mm<sup>2</sup>)</b>	15420
	<b>Thermal Resistance (R<sub>hs-amb</sub>)</b>	6.25 (°C/W)

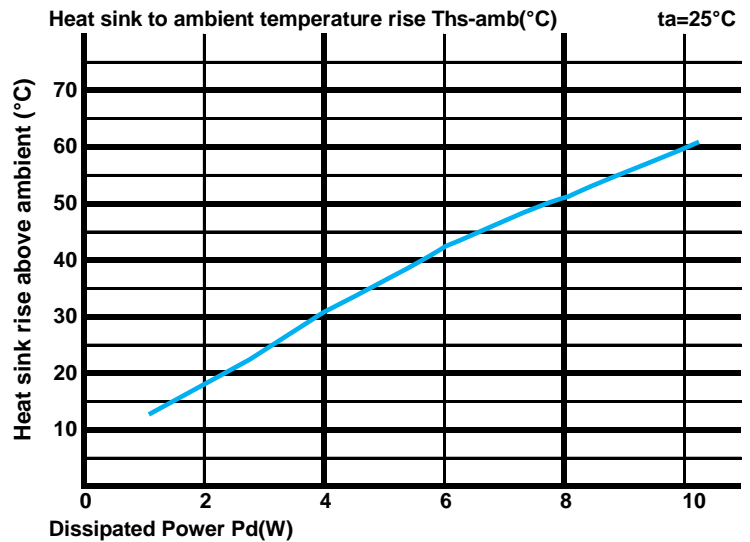
#### The thermal data table

\* 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-EDI-4830	
2.0		9.00	18.0
4.0		7.50	30.0
6.0		7.00	42.0
8.0		6.25	50.0
10.0		5.90	59.0



\*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:

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