

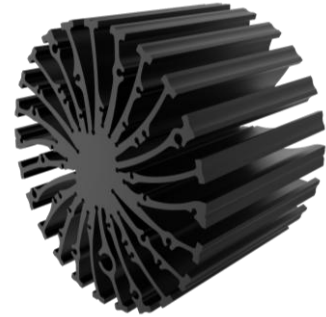


EtraLED

EtraLED-BRI-130100 Bridgelux Modular Passive Star LED Heat Sink Φ 130mm

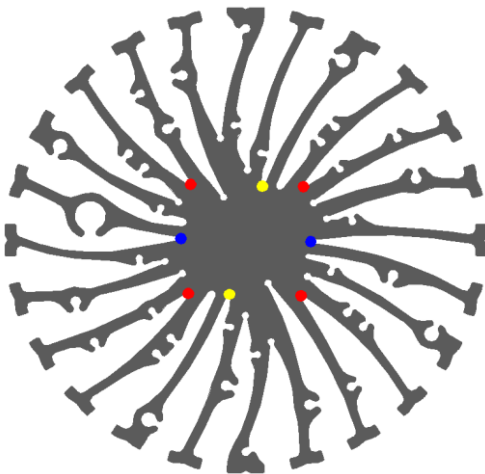
Features VS Benefits

- * The EtraLED-BRI-130100 Bridgelux modular passive star LED heat sink are specifically designed for luminaires using the Bridgelux 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 4,000 to 9,700 lumen.
- * Thermal resistance range R_{th} 0.77°C/W.
- * Modular design with mounting holes foreseen for direct mounting of Bridgelux V Series™, Vero® SE Series, Vero® Series, H Series™ and Vesta™ Series LED engines.
- * Diameter 130.0mm - standard height 100.0mm, Other heights on request.
- * Extruded from highly conductive aluminum.



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

- * Below you find an overview of Bridgelux 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.



Bridgelux LED Modules directly Mounting Options

Bridgelux V18, V22 LED Array Series:

- BXRE-20xxxxxx-x-xx; BXRE-40xxxxxx-x-xx;
- BXRE-27xxxxxx-x-xx; BXRE-50xxxxxx-x-xx;
- BXRE-30xxxxxx-x-xx; BXRE-57xxxxxx-x-xx;
- BXRE-35xxxxxx-x-xx; BXRE-65xxxxxx-x-xx;

With the Zhaga Book 3 Holders:

BJB holder:47.319.2224.50; 47.319.2030.50;

Direct mounting with machine screws M3x6.5mm, Blue indicator marks.

Bridgelux Vero® Series Vero 18, Vero 29 LED Array and Vero® SE Series

Vero 18 SE, Vero 29 SE LED Array

- BXRC-27xxxxx-x-xx; BXRC-50xxxxxx-x-xx;
- BXRC-30xxxxx-x-xx; BXRC-57xxxxxx-x-xx;
- BXRC-35xxxxx-x-xx; BXRC-65xxxxxx-x-xx;
- BXRC-40xxxxx-x-xx;

With the Bridgelux Holder:

Direct mounting with machine screws M3x6.5mm.

Vero 18 for the yellow indicator mark, Vero 29 for the red indicator mark.

Bridgelux® H Series™ H12, H15 LED Array:

- BXRH-27xxxxx-x-xx; BXRH-35xxxxxx-x-xx;
- BXRH-30xxxxx-x-xx; BXRH-40xxxxxx-x-xx;

With the Zhaga Book 3 Holders:

BJB holder:47.319.2131.50; 47.319.2021.50;

Direct mounting with machine screws M3x6.5mm, Blue indicator marks.

EtraLED

EtraLED-BRI-130100 Bridgelux Modular Passive Star LED Heat Sink Φ 130mm

Mounting Options and Drawings & Dimensions

Example: EtraLED-BRI-130100-B-1,2

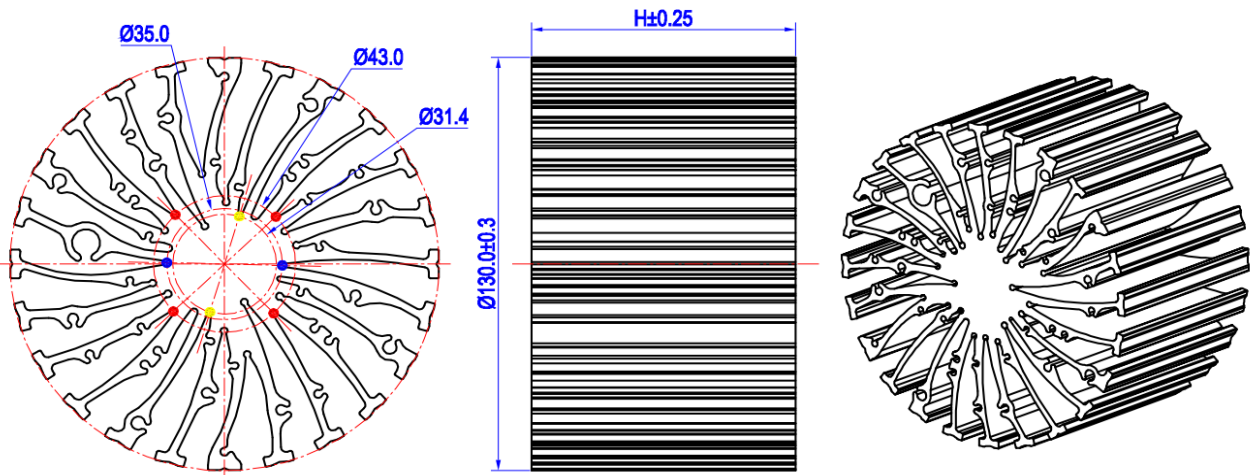
Example: EtraLED-BRI-130 **1** - **2** - **3**

- 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	Vero 18 Vero SE 18	Bridgelux	M3	6.5mm	31.4mm/ 2-@180°
2	H12	BJB Holder 47.319.2131.50	M3	6.5mm	35.0mm/ 2-@180°
	H15	BJB Holder 47.319.2021.50			
	V18	BJB Holder 47.319.2224.50			
	V22	BJB Holder 47.319.2030.50			
3	Vero 29 Vero SE 29	Bridgelux	M3	6.5mm	43.0mm/ 4-@90°



EtraLED

EtraLED-BRI-130100 Bridgelux Modular Passive Star LED Heat Sink Φ 130mm

The product data table

	Model No.	EtraLED-BRI-130100
	Heatsink Size	Φ 130xH100mm
	Heatsink Material	AL6063-T5
	Finish	Black Anodized
	Weight (g)	1300.0
	Dissipated power (Ths-amb,50°C)	65.0 (W)
	Cooling surface area (mm ²)	304263
	Thermal Resistance (Rhs-amb)	0.77 (°C/W)

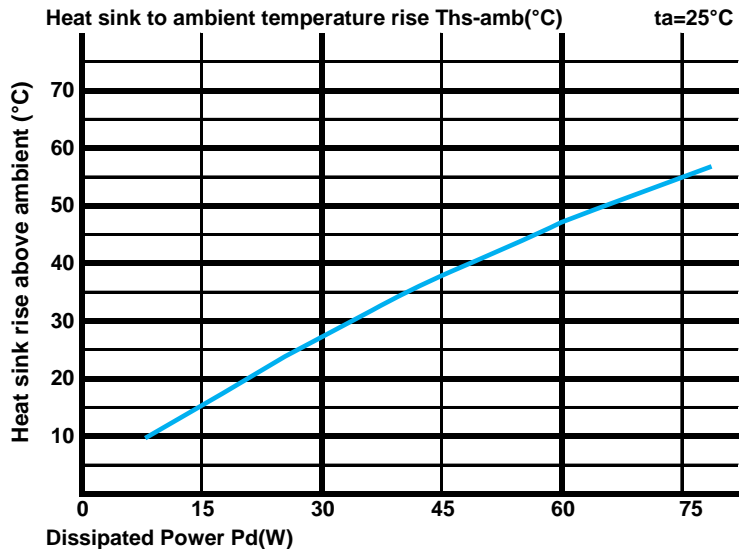
The thermal data table

* 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;

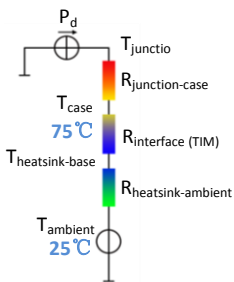
Dissipated Power Pd(W)	Pd = Pe x (1-ηL)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
		EtraLED-BRI-130100	
15.0		1.00	15.0
30.0		0.90	27.0
45.0		0.84	38.0
60.0		0.78	47.0
75.0		0.73	55.0



*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: $\theta = (Ths - Ta) / Pd$

θ - Thermal Resistance [°C/W]; Ths - Heatsink temperature ; Ta - 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:

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