# CoolStar® 86 Designer series LED Star Cooler ø86mm

Features & Benefits

- For spot and downlight designs from 2,300 to 6,100 lumen
- Thermal resistance range Rth 1.56 - 2.08°C/W
- Modular design with mounting holes foreseen for a wide range of LED modules and COB's:
  - All Zhaga Book 3 LED engines and holders
  - Bridgelux Gen7 Vero & Décor Vero 13/18, Vero SE & Décor Vero SE 13/18, Gen7 V 10/13/18/22, Gen7 V6/9HD, Vesta Tunable White 9/13mm, Dim-To-Warm 9/13/15mm
  - Citizen CLU028/02J, CLU038/03J, CLU04J, CLU702, CLU712
  - Cree XLamp CXA18, CXB18, CMT14/19, CMA13/15/18
  - Edison EdiPower III HM13/16/24/30- LG Innotek LEMWM18 10W, 13W, 17W, 24W, LEMWM28
  - Lumileds Gen4 Luxeon (Hight Density) COB's 1202s, 1203, 1204, 1205, 1208, 1211
  - Luminus CHM-11 (ACxx), CHM-11-XH00, CLM-14 (ACxx), CXM-14 (ACxx), CHM-14 (ACxx), CLM-22, CXM-22
  - Nichia NFCWL036/048/060/072B, NFCWD084/096B, NFCWJ108/120B, NFDWJ130B, NVNWS007Z, NJCES024Z, NVEWL016/024Z
  - Osram PrevaLED Core AC G2, G7 L15 H1, G7 Food/Fashion, AC PRO
  - Osram Soleriq S13, S19
  - Philips Fortimo SLM Gen4, Gen6
  - Prolight Opto PACE, PACF
  - Seoul Semiconductor Acrich MJT(SunLike), ZC4, ZC6, ZC12, ZC18, ZC25, ZC40,
  - Sharp INTERMO, Mega Zenigata
  - Tridonic TALEXX STARK SLE Gen6 15/17/19/23mm, Module SLE G7 ADV 09/13/15/ 17/21mm
  - Vossloh Schwabe Luga Shop Gen6 DMS125, 126, 128
  - Xicato Chip on Board LED light source XOB09/14/23

- Designer series with high end looks and extra functionality - wire pockets at each side of the LED cooler
- Diameter 86mm - Standard height 30mm & 60mm Other heights on request
- Black anodized or white electro-coating finishing
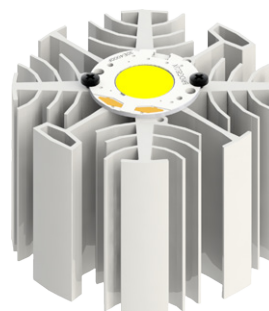
Zhaga
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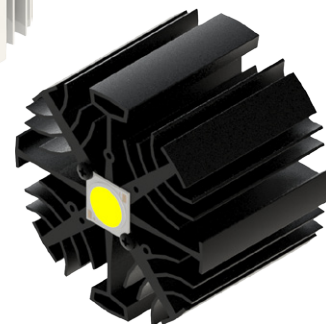
Order Information

LED Holders

BENDER +WIRTH   BJB   IDEAL   TE connectivity

LED Brands

bridgelux   CITIZEN Micro Humantech   CREE   EDISON

LG Innotek   Lit by LUMILEDS   LUMINUS   NICHIA

OSRAM   OSRAM Opto Semiconductors   LED Light for you powered by OSRAM CERTIFIED PARTNER   PHILIPS

ProLight Opto Technology Corporation   SEOUL SEMICONDUCTOR   SHARP   TRIDONIC

VS LIGHTING SOLUTIONS   Xicato

Example : CoolStar® Black 8630

CoolStar® **1** 86 **2**

1 Finishing Color
Black - Black anodized
White - White electro-coating

2 Height (mm)

CoolStar® 86 is designed in this way that you can mount LED modules from various manufacturers on the same LED cooler

Simple mounting with M3 screws

Recommened screw force 6lb/in

Screws are avaliable from MechaTronix

MTx MechaTronix

CoolStar® 86 Designer series LED Star Cooler ø86mm

Product Details

Model n°	CoolStar® 8630	CoolStar® 8660
Dimension (mm)[*1]	ø86 x h30	ø86 x h60
Volume (mm³)	57468	115212
Cooling Surface (mm²)	49907	95532
Weight (gr)	155	311
Thermal Resistance (°C/W)[*2]	2.08	1.56
Power Pd (W)[*3]	24	32
Heat Sink Material	AL6063-T5	AL6063-T5

[*1] 3D files are avaliable in ParaSolid, STP and IGS on request

[*2] The thermal resistance Rth is determined with a calibrated heat source of 15mm x 15mm central placed on the heat sink, Tamb 40°
and an open environment. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C
The thermal resistance of a LED cooler is not a fix value and will vary with the applied dissipated power Pd

[*3] Dissipated power Pd. Reference data @ heat sink to ambient temperature rise Ths-amb 50°C
The maximal dissipated power needs to be verified in function of required case temperature Tc or junction temperature Tj and related to
the estimated ambient temperature where the light fixture will be placed
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: $Pd = Pe \times (1-\eta L)$
Pd - Dissipated power
Pe - Electrical power
ηL = Light effciency of the LED module

Notes:

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