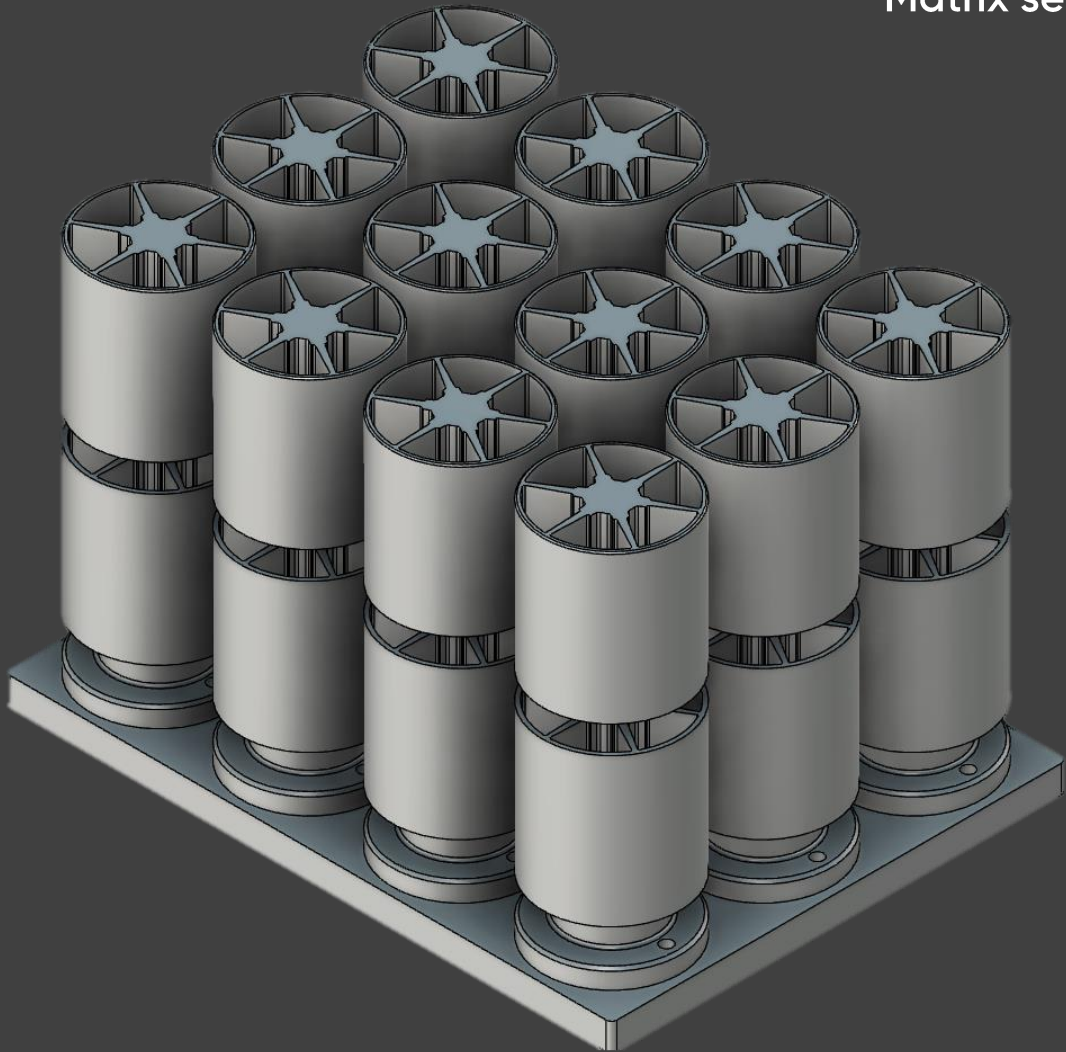


Up to 840W Cooling  
power with COMET  
Matrix series



**CooliBlade COMET**  
High-performance Cooling Solution  
for Natural Convection Applications

## CooliBlade COMET

CooliBlade has developed new advanced free convection cooling solution, COMET Matrix.

COMET modules are used to provide excellent heat distribution throughout the whole structure. Providing excellent cooling performance. Number of COMET modules defines the system level performance.

COMET Matrix is modular, providing flexibility for the product designers. Product size, weight and performance can be easily optimized to meet different requirements.

## Several hundreds of watts Cooling Power with free convection

COMET Matrix provides excellent performance in compact and lightweight form factor.

There are four different standard sizes of COMET Matrix heat sinks.

COMET custom-made OEM Matrix is an option if the standard solution does not meet the requirements.

## Key Benefits

- **Lightweight** – 50% weight reduction compared to aluminum heat sinks
- **No tooling costs** – Start with our ready-to-go evaluation designs and build your cooling concept in a day.
- **Easy-to-design** – It's easy to design a product on top of a modular COMET cooling platform.
- **Instant transfer to production** – Standardized and cost-efficient COMET modules enable an instant transfer of your prototype to scalable production.

## Applications

Typically, Comet Matrix is chosen when free convection cooling, high power, compact form factor and light weight are required.

Typical and most demanding applications are stadium lighting, high-temperature industrial lighting, and large-area outdoor lighting where all those requirements are necessary.

## Power levels

40 – 800 W

## Thermal resistance

0.15 – 0,2 °C/W

## Use case

Components and PCBs

## Features

Powerful in COB and matrix applications

Design freedom by modular units

Suitable for all kind of modules and LEDs

## Devices and Applications

LED lighting, Electro-mechanical devices

## Technical Specifications

Heat Sink Material:	Aluminum
Working Fluid:	Hydrocarbon
Length (mm):	150 mm, other lengths on request
Diameters (mm):	50 or 70 mm
Weight:	260g (150 mm)
Operational	±85°
between angles	
Thermal Resistance	0.12 K/W (Natural convection,
$R_{Th}$	12 Modules Matrix, Dia 70 mm)

## Conclusion

CooliBlade COMET Matrix provides a flexible platform to optimize the heat sink's performance and size easily. Powerful COMET modules with two standard sizes enable to build of various combinations to different dedicated applications. COMET Matrix platform is adaptable for an extensive power range.

Please don't hesitate to contact us if you need consultancy in your thermal management solution.

### COMET Module Series



COMET 50S Matrix



COMET 50D Matrix



COMET 70S Matrix

### COMET Evaluation Designs



COMET 70S 1x4 Matrix



COMET 70S 2x2 Matrix



COMET 70S 2x4 Matrix



COMET 70S 3x4 Matrix