

CooliBlade **ULTIMA**

PRODUCT BROCHURE

High-performance Cooling Solution
for Forced Convection Applications

CooliBlade ULTIMA

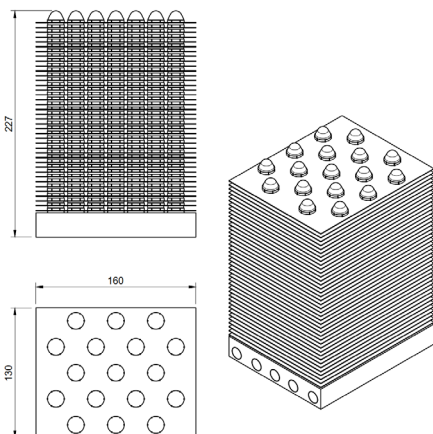
CooliBlade ULTIMA is standardized air-cooling module for standard IGBT power modules. It offers a shortcut in product development, giving a powerful solution to thermal management needs. ULTIMA modules are based on CooliBlade's unique NEOcore thermal channel technology. NEOcore thermal channels are integrated into solid aluminum structures, eliminating thermal interfaces and making the structure sturdy and environmentally sustainable.

Benefits

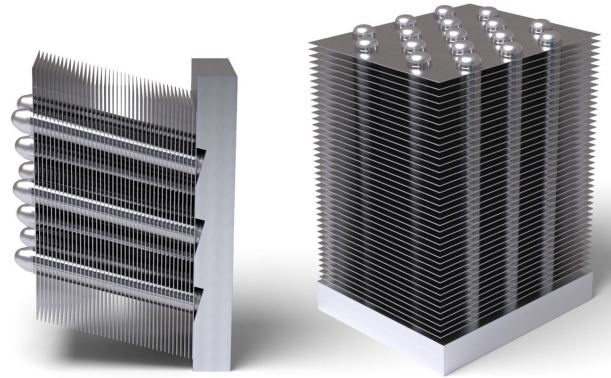
- **Powerful** – ULTIMA supports power levels up to several kilowatts per module with superior efficiency via its large evaporator and optimized fin structure.
- **Lightweight** – ULTIMA's construction from aluminum pipes and sheet metal fins makes it lightweight and easy to integrate into end products.
- **Design Optimization** – ULTIMA ensures effective forced convection cooling with a fin design providing high airflow and low back pressure.
- **Installation Freedom** – ULTIMA offers versatile installation capabilities, supporting both horizontal and vertical setups, enabling innovative product design.

How to begin?

We have made two evaluation designs that can be used to dive into the ULTIMA product platform. AURORA platform fits well, especially for IGBT cooling when IGBT modules are mounted vertically. With evaluation and design results, it is easy to evaluate the applicability of the AURORA heat sink platform and its performance benefits.



ULTIMA Dimensions



Applications

- Industrial control
- AC drives
- IGBT
- Renewable energy
- Power inverters/converters

Technical Specifications

Heat Sink Material:	Aluminium
Working Fluid:	Hydrocarbon
Weight:	2700 g
Operational angles (in gravity field):	0° to ±5°
Thermal Resistance R_{th} :	0,028 K/W
Maximum heat sink temperature:	150 °C

Operating Specifications:

Operating IGBT Temperature:	-20 °C to +150 °C
Ambient Air Temperature:	-20 °C to +60 °C
Storage Temperature:	-50 °C to +90 °C

Standards:

CE mark Compliant:	Yes
RoHS Compliant:	Yes
REACH Compliant:	Yes
Other certification:	Based on request