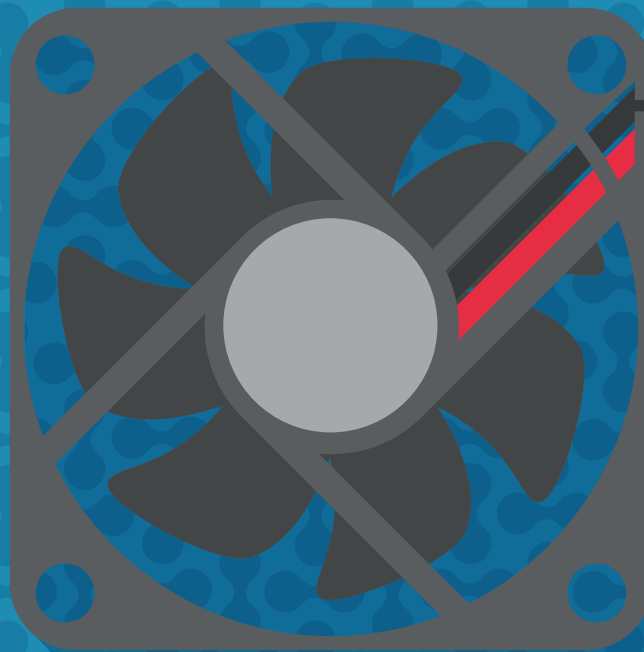


CUI DEVICES

Thermal Management

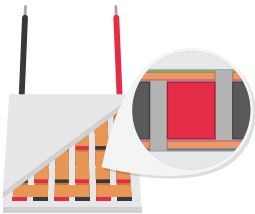
Dc Fans, Heat Sinks & Peltier Devices



DEFEAT HEAT

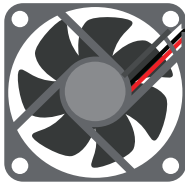
As the heat in applications continues to rise due to increasing power densities, addressing your growing thermal management needs has become more crucial than ever. To help keep your design running at its peak condition, we have developed a thermal management portfolio that encompasses a range of dc fans, heat sinks, and Peltier thermoelectric cooling devices.

Innovative Technologies



arcTEC™ Structure

CUI Devices' innovative arcTEC™ structure combats the effects of thermal fatigue found in thermoelectric modules by incorporating a thermally conductive resin between the electrical interconnect and ceramic on the cold side of the module, high temperature solder, and larger P/N elements made from premium silicon ingot. The combination of these three enhancements greatly improves the reliability, performance, and cycle life of Peltier modules built with the arcTEC structure, allowing them to outperform conventional thermoelectric coolers in the most demanding applications.



omniCOOL™ System

CUI Devices' omniCOOL™ system bridges the gap between traditional sleeve and ball bearing fan and blower technologies, thanks to a combination of its magnetic structure and enhanced sleeve bearing design. The omniCOOL system's two features integrate to dramatically reduce friction, wobble, and noise found in traditional bearing types, while extending dc fan life and improving operation. By addressing many of the drawbacks presented by sleeve and ball bearings, CUI Devices' fans built with the omniCOOL system ultimately lessen the tradeoff between fan cost and performance.

Engineering Tools



Parametric Search

With hundreds of dc fans, heat sinks, and Peltier devices to choose from, utilize our online parametric search tool to quickly find and compare models based on your key specifications.



CAD Model Library

CUI Devices' library of ready-made 3D models helps to streamline the design process, saving you precious time and resources. Users are able to view and download 3D models in all major mechanical CAD formats free of charge.



Thermal Calculators

Use our airflow and thermal conversion calculators to quickly convert between common units for volume airflow, air velocity, thermal resistance, specific heat, thermal conductivity, and thermal conductance.

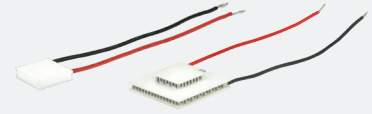
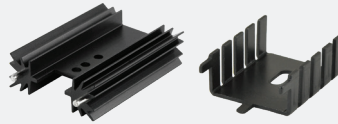
[View these and more helpful resources at www.cuidevices.com/resources](http://www.cuidevices.com/resources)



Global Stock Availability

Our network of global distribution partners provides you with quick and easy access to hundreds of our thermal management products, ready to ship same day across the globe.

THERMAL MANAGEMENT PRODUCT LINE



Dc Fans

Axial Fans & Centrifugal Blowers

- 25 ~ 120 mm frame sizes
- Airflows up to 200 CFM
- 5, 12, 24, 48 Vdc rated voltages
- Ball bearing, sleeve bearing & omniCOOL™ system construction
- Auto restart protection
- Tachometer signal, rotation detector & PWM control signal options
- 1,700 ~ 13,000 RPM rated speeds
- 0.04 ~ 5.22 in H₂O static pressures
- 10.7 ~ 69.9 dBA noise levels

Heat Sinks

Extruded & Stamped Versions

- Aluminum & copper heat sinks
- TO-218, TO-220, TO-252 & TO-263 transistor package types
- Thermal resistances down to 4.49°C/W at 75°C, nat conv
- Power dissipation ratings up to 16.7 W at 75°C, nat conv
- Black anodized & tin plated material finishes
- Available with or without solder pins
- Vertical or horizontal solder pin orientations

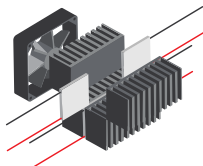
Peltier Devices

3.4 ~ 70 mm Package Sizes

- Profiles as low as 1.95 mm
- 0.7 ~ 18 A current ratings
- 70 up to 105°C ΔT_{max} (Th=50°C)
- Precise temperature control
- Solid state construction
- High performance modules with arcTEC™ structure
- Two-stage modules with high ΔT_{max}
- Peltier cooling units available with better seal structure

Custom Capabilities

Dc Fans	Heat Sinks	Peltier Devices
<p>Multiple External Modifications</p> <p>Custom Wires</p> <ul style="list-style-type: none"> • Tachometer signal • Rotation detector • PWM control signal • Modified wire lengths & gauges • Custom connectors 	<p>Multiple Production Methods</p> <ul style="list-style-type: none"> • Extrusion • Stamping • Forging • Die casting <p>Range of Materials</p> <p>Variety of Finishes</p> <ul style="list-style-type: none"> • Black, clear & color anodization • Chromate powder coating • Nickel & zinc plating <p>Hole Punching Options</p>	<p>Variety of Shapes & Sizes</p> <ul style="list-style-type: none"> • Square profiles up to 62 mm • Rectangular profile lengths up to 89 mm • Round profiles up to 50 mm in diameter • Available with or without center hole <p>Custom Wires</p> <ul style="list-style-type: none"> • Modified wire lengths • Custom connectors <p>Heat Sink Integrations</p> <ul style="list-style-type: none"> • Add heat sinks to our Peltier modules using thermal interface materials (TIM) for improved thermal performance



Thermal Integrations

In addition to our individual custom offerings, CUI Devices' dc fans, heat sinks, and Peltier devices can be combined and mounted together using thermal interface materials (TIM) to achieve more complex custom thermal solutions. This capability allows us to meet your exact thermal requirements without compromise.

CUI DEVICES

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