

MechaTronix in LED

ModuLED Pico smallest spot light LED cooler for 1.800 lumen

As an extension to the success of the ModuLED modular LED coolers, MechaTronix developed a new era of passive LED cooling in a diameter of 47 millimeter, named the ModuLED Pico

The choice for a diameter of 47mm speaks for itself
With this diameter the new LED spot or down light can easily fit in any existing lighting fixture with classic MR16 or GU10 lamps



The secret of the ModuLED Pico has to be found in the way how the ultimate thermal performance has been reached in this narrow diameter
The ModuLED Pico has a unique thermal design, based on the ideal balance between creating cooling surface and generating space for free air convection cooling
The visible outer surface is extended to generate extra radiation cooling
Radiation can count up to 40% of the total cooling performance in free air convection environments, and mainly depends on the visible surface and the emissivity of the surface
Even under tilted position of 50 degrees the cooling performance remains almost unchanged what makes the ModuLED Pico the ideal cooling source for tiltable spot and down light designs

[Read news online](#)

[Request info or sample](#)

[Visit our website](#)

Two new version become available and focus on the medium LED spot and down light market from 600 to 1.800 lumen
With a fix diameter of 47mm and lengths of 50mm and 80mm the ModuLED Pico performs a thermal resistance of respectively 5.2°C/W and 4.2°C/W

The ModuLED Pico is foreseen from a variety of standard mounting patterns for all the newest generation LED modules and COB's
In this way lighting designers can standardize their designs with a limited number of LED coolers
Following mounting patterns are standard foreseen for mounting with self-tapping screws:

- Bridgelux ES star, ES rectangle, V-series, Vero 10, Vero 13, Vero 18
- Citizen Citiled CLL022, CLL032 COB's
- Edison Opto Edilex SLM, Edipower II HM/HR/HS/HV/SD COB's
- LG Innotek PKG 10/13/17/24W COB's
- Osram Prevaled
- Philips Fortimo SLM
- Philips Lumileds Luxeon COB's 1203/1204/1205/1208
- Prolight Opto PACB, PANA, PABA COB's
- Tridonic Talexx Stark SLE & Mini
- Vossloh Schwabe Luga Shop
- Xicato XSM spot light modules
- Zhaga book 3

MechaTronix performs thermal compatibility tests of each led module with the dedicated led coolers and publishes this data in the detailed datasheets

By selecting the led module, driving current and estimated ambient temperature, designers get the effective case temperature T_c the LED module will become

Since correct thermal management is indispensable for the life span of a LED luminaire, MechaTronix also offers thermal validation of the complete lighting fixture

Full details of the ModuLED Pico LED coolers can be found on www.led-heatsink.com
Samples and stock are available through our worldwide distribution network

ABOUT MECHATRONIX

MechaTronix was founded as a creative designer & manufacturer of high end mechanical plastic & metal parts. With its Asia-based headquarters in Kaohsiung Taiwan, MechaTronix became a powerhouse at designing and manufacturing heat sinks and thermal solutions for OEM and LED lighting applications. Strategic partnerships with major LED manufacturers and sharing our thermal knowledge with their luminaire designers are our core missions. Simple passive cooling, advanced heat pipe technology or active cooling solutions? MechaTronix offers of the shelf and tailored solutions to its worldwide professional customer base. For more information about the company, please visit : www.mechatronix-asia.com

