

Green Innovation Living Unveils Air-Cooled Thermal Module to Rival Liquid Cooling in High-Power Servers

New Air-Based Cooling Module Makes Impossible Possible by Redefining Thermal Limits Previously Thought Achievable Only by Liquid Cooling.

LOS ANGELES, CA, UNITED STATES, July 15, 2025 /EINPresswire.com/ -- Green Innovation Living Inc. today unveiled a groundbreaking advancement in thermal engineering, introducing an innovative air-cooled thermal module capable of effectively replacing traditional liquid cooling systems in high-power computing environments. Designed specifically for 1U and 2U server configurations, this revolutionary module effortlessly manages heat loads reaching up to 700 watts in 1U servers and an unprecedented 1200 watts in 2U servers, performance metrics that were previously believed achievable solely through liquid cooling solutions.

At the core of this transformative technology lies a completely reimagined heat sink architecture that boldly challenges long-established conventions regarding fin structure. By utilizing advanced, optimized 3D airflow dynamics, the module delivers quiet, efficient, and leak-free cooling, achieving a remarkably low system-level temperature difference (delta T) of less than 5°C. Such superior thermal performance had long been regarded as unattainable with conventional air cooling alone.

"'Make Impossible a Possible' is not just a slogan; it's our commitment to redefining what air cooling can achieve," stated S.Y. Chen, CEO of Green Innovation Living Inc. "This innovation bridges the performance gap between air and liquid cooling while simultaneously delivering substantial cost savings, ease of service, and enhanced reliability. It empowers the next generation of AI, HPC, and edge computing systems to scale effortlessly, sustainably, and cost-effectively."

Key Technical Highlights of the New Thermal Module Include:

1. Outstanding Thermal Resistance: Tested at 0.030°C/W under a 1000W simulated heat load, demonstrating groundbreaking efficiency.

Target Components: Engineered specifically to cool high-flux chips including GPUs (e.g., NVIDIA B200), CPUs, and ASICs operating in the demanding 700–1200W power range.

2. Completely Passive, Air-Based Design: Eliminating the complexity of pumps and fluids, ensuring a leak-free, ultra-reliable operation.

Innovative Core Technology: Features an advanced 6mm vapor chamber integrated with

proprietary 3D fin-stack geometry, maximizing heat transfer efficiency.

3. Airflow Optimization: Designed specifically for standard rack environments with 180–250 CFM airflow, providing seamless integration into existing infrastructure.

4. Superior Thermal Delta: Maintains less than 5°C differential between the heat source and cooling fins, an industry-leading benchmark.

Noise and Maintenance Advantage: A low-noise, minimal-maintenance alternative to complicated liquid-based systems, dramatically reducing both operational complexity and servicing costs.

The implications of this breakthrough extend across multiple critical technology sectors and applications. Beyond data centers and high-density computing racks, the air-cooled thermal module is particularly suitable for AI and HPC servers, edge computing modules, distributed computing systems, electric vehicle (EV) fast-charging station cooling infrastructure, refrigeration and HVAC efficiency enhancements, and thermal exchange systems throughout the broader energy sector for decades to come.

Ideal Applications Include:

1. High-power GPUs, CPUs, and ASICs in the 700–1200W range
2. 1U and 2U AI/HPC data center servers
3. Edge computing modules and distributed processing systems
4. Mid-to-high-density rack environments as direct replacements for liquid cooling
5. Thermal management systems for EV fast-charging infrastructure
6. Efficiency optimization for refrigeration, HVAC, and broader energy sector applications

Currently entering its pilot integration phase, the air-cooled thermal module is now available for evaluation by OEM/ODM partners, data center integrators, and strategic collaborators interested in custom adaptations tailored for large-scale deployments. Green Innovation Living Inc. is actively inviting strategic investors and technology partners to join forces in shaping a more efficient, sustainable future for thermal management.

For detailed information on availability, partnership opportunities, or evaluation inquiries, interested parties are encouraged to contact Green Innovation Living's Taiwan location directly at sychen313@gmail.com or by phone at +886 919-273-975. The company maintains a strong global presence, with established locations in Taipei, Los Angeles, Tokyo, the European Union, and China, facilitating seamless international collaboration and support.

For more info, visit: www.gilivings.com

S.Y. Chen, CEO

Green Innovation Living Inc.

+1 909-206-8995

shyi@gilivings.com

This press release can be viewed online at: <https://www.einpresswire.com/article/830531441>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.