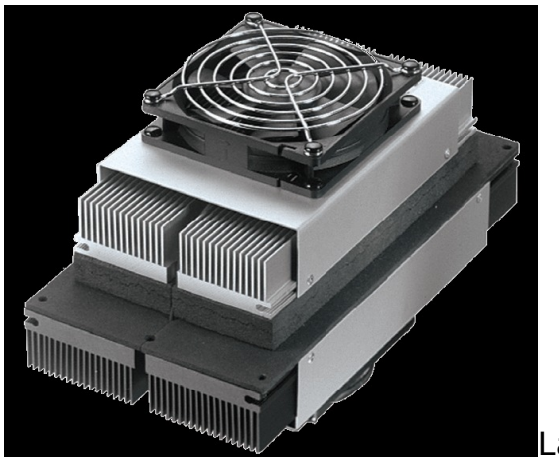
Outdoor Thermoelectric Coolers offer Bi-Polar Thermostatic Control



Laird Technologies, a global leader in the design and supply of customized performance-critical components and systems for advanced electronics and wireless products, today announced the release of its new Outdoor Thermoelectric Cooler Series with Bi-Polar Thermostatic Control [1].

The AA Outdoor Cooler Series is a ruggedized Air-Air [2] Thermoelectric Assembly (TEA) [1] that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling or heating enclosures via convection. A bi-polar thermostatic controller with predetermined set points is integrated inside the TEA to maintain its tight form factor. The unit is available in two of Laird Technologies' most popular set point configurations. The LK-81 is programmed to cool when the internal of the enclosure exceeds 25°C and heat when it drops below 10°C. Products in this series are offered in four models:

- AA-150-24-44-LK-XX [3] - 150 watt capacity, 24 volt operation
- AA-150-48-44-LK-XX [4] - 150 watt capacity, 48 volt operation
- AA-200-24-44-LK-XX [5] - 200 watt capacity, 24 volt operation
- AA-200-48-44-LK-XX [6] - 200 watt capacity, 48 volt operation

The LE-80 is programmed to cool when the internal temperature of the enclosure exceeds 35°C and heat when it drops below 5°C. Products in this series are also offered in four models:

- AA-150-24-44-LE-XX [7] - 150 watt capacity, 24 volt operation
- AA-150-48-44-LE-XX [8] - 150 watt capacity, 48 volt operation
- AA-200-24-44-LE-XX [9] - 200 watt capacity, 24 volt operation
- AA-200-48-44-LE-XX [10] - 200 watt capacity, 48 volt operation

This product series has been designed to pass rigorous Telcordia test requirements

conducted by Laird Technologies' customers, such as earthquake resistance, salt fog, wind-driven rain, high temperature exposure and dust contaminants. This is due to the selection of world-class components such as brand fans with the highest degree of environmental protection, heavy duty anodization on the high-density heat sinks, lifetime guaranteed waterproof connectors, overheat protection and double environmental seals for the Thermoelectric Modules (TEMs) [11].

"System integration manufacturers are looking for advanced closed loop temperature control solutions on short notice so as to meet the needs of their telecom customers," said Andrew Dereka, Laird Technologies Thermoelectric Product Manager. "This product offers a readily available solution that meets the response time of the market and embeds a closed loop feedback control inside the TEA. This takes advantage of the efficiency and extended service life of the TEA while maintaining s compact form factor and ease of installation."

As an industry leader in high-performance and cost-effective Thermal Management Solutions [12], Laird Technologies provides the knowledge, innovation, and resources to ensure exceptional thermal performance and customer satisfaction for applications in the medical [13], analytical [13], telecom [14], industrial [13], and consumer [15] markets. For more information, please logon to www.lairdtech.com [16].

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http://www.ecnmag.com/product-releases/2010/12/outdoor-thermoelectric-coolers-offer-bi-polar-thermostatic-control?qt-video_of_the_day=0

Links:
[1] http://www.lairdtech.com/Products/Thermal-Management-Solutions/Thermoelectric-Assemblies/
[2] http://lairdtech.thomasnet.com/viewitems/thermoelectric-assemblies/air-air-systems-aa-assemblies?forward=1
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