



## THERMOELECTRIC COOLING UNITS FOR OUTDOOR ENCLOSURES AND KIOSKS

The AA-480 Outdoor Thermoelectric Cooler is an Air-to-Air thermoelectric assembly (TEA) that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling objects via convection. The AA-480 has 480 Watts of cooling capacity and a COP of 1 at  $\Delta T = 0^{\circ}\text{C}$ . Heat is absorbed and dissipated thru custom designed heat exchangers with high aspect ratio, air ducted shrouds and high performance fans. The heat pumping action occurs from custom designed thermoelectric modules that achieve a high coefficient of performance (COP) to minimize power consumption.

This product series has been designed to pass rigorous Telcordia test requirements for outdoor environments. This is due to the selection of world class components such as brand name fans with the highest degree of environmental protection and lifetime guaranteed waterproof connectors, heavy duty anodization on the high-density heat exchangers, overheat protection, and double environmental seals for the thermoelectric modules.

## FEATURES AND BENEFITS

- 480W capacity rated at  $\Delta T = 0^{\circ}\text{C}$ ,  $T_{\text{ambient}} = 35^{\circ}\text{C}$
- Wide operating temperature range of  $-40^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- Power cycle tested up to 100K cycles
- Gaskets, connectors, and fans provide a NEMA 4 seal for the enclosure
- Environmentally friendly solid state operation – no compressor or CFC refrigerants
- Cooling and heating in the same unit; optional temperature controller reverses the polarity of current to generate heating

## APPLICATIONS

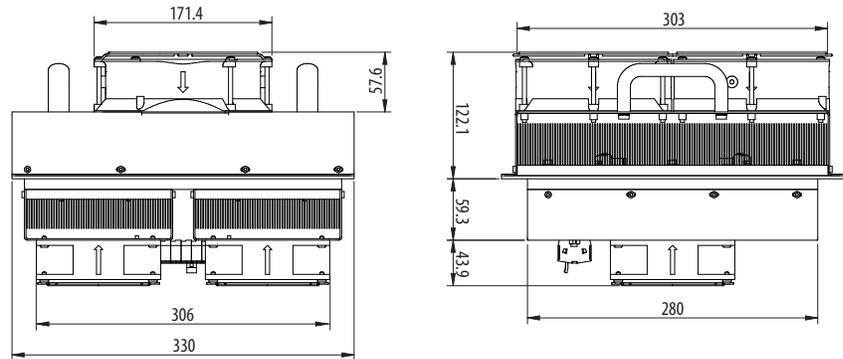
- Outdoor telecom enclosures
- Outdoor kiosks and displays
- Harsh condition electronic cabinets
- Battery cabinets

Americas: +1.919.597.7300  
Europe: +46.31.420530  
Asia: +86.755.2714.1166

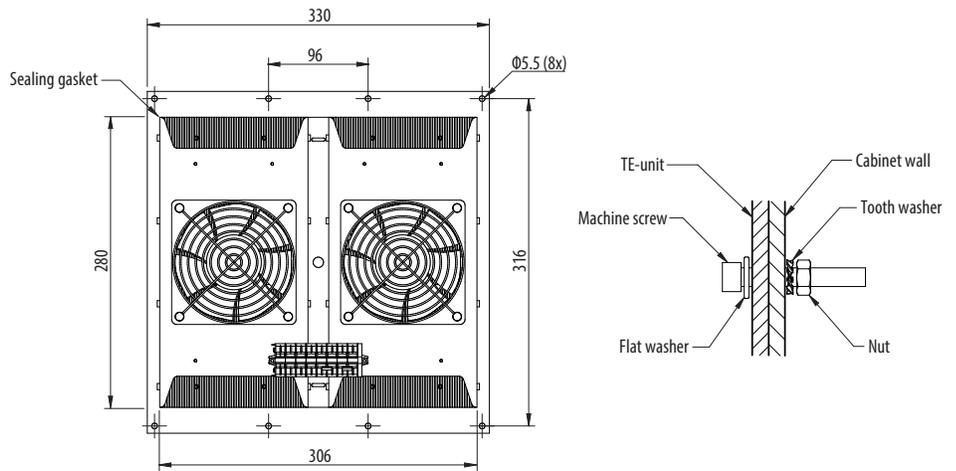
order.gothenburg@lairdtech.com  
[www.lairdtech.com](http://www.lairdtech.com)



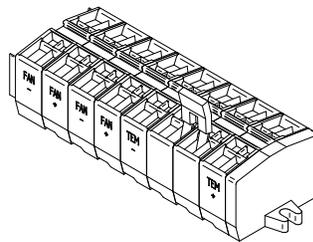
## MECHANICAL DRAWINGS



## MOUNTING HOLE LOCATION & HARDWARE



## ELECTRICAL CONNECTION 48VDC (CAGE CLAMP)



THR-DS-AA-480-48-44-00-XX 0515

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