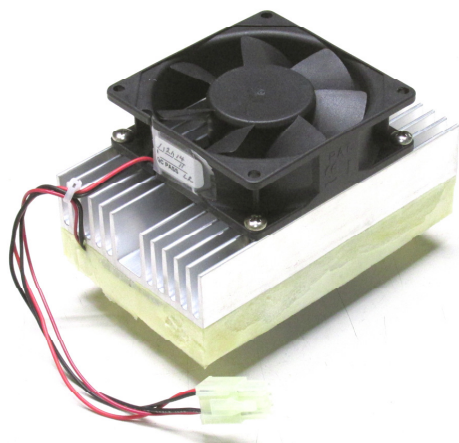


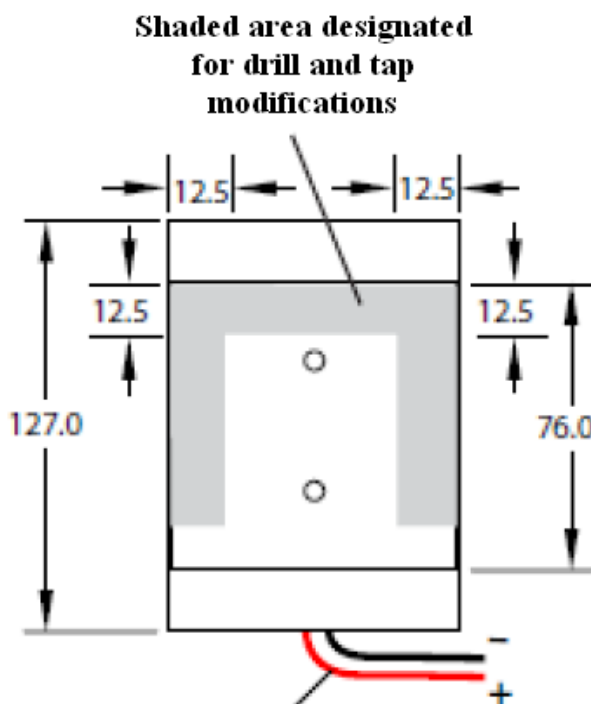
PK-1 Thermoelectric Cold Plate



Plug-and-play design with experimentation in mind.

The PK-1 is named for the simple Prototype Kit intent of the design. High performance Tellurex thermoelectric modules with unmatched protection against dielectric and moisture related corrosion issues insures outstanding performance and longevity of your system. Built-in thermostatic over-temperature control allows experimentation in heating mode without worries of overheating. The slim line design of the PK-1 provides excellent conductive heat pumping capabilities in an efficient, thoughtful package. Plug-and-Play convenience means your Tellurex system arrives error proof pre-wired to match all Tellurex components. You receive a solution, not a puzzle.

Capacity Rating	17 watts (58 BTU/HR) (@25°C ambient)
Power	12 vdc, 4 amp, 48 watts max (@25°C ambient)
Weight	600 grams
Operating Range	-10°C to 70°C
Construction	corrosion resistant materials; anodized aluminum, aluminum, stainless steel fasteners, temperature resistant plastics
Applications	Conductive heat transfer, cold plates, component cooling, spot cooling, educational, prototype experimentation
Connections	Pre-wired for error proof plug-and-play convenience.
Heat mode protection	85°C thermostatic
Maintenance	Virtually maintenance free, remove excessive dust and grime deposits.



Thermoelectric module wiring:
(Red is positive for cooling)



All dimensions in mm

For the entire Plug-and-Play experience, add these fully compatible Tellurex products:

- TTC-12-24A Digital Temperature Controller
- PS-12-12 Direct Current Power Supply

Plug-and-Play harness:

- 6 pin plug Amp Mate-N-Lok ® 172339-1
- Pin, Tyco/Amp Mini Universal Mate-N-Lok ® 170360

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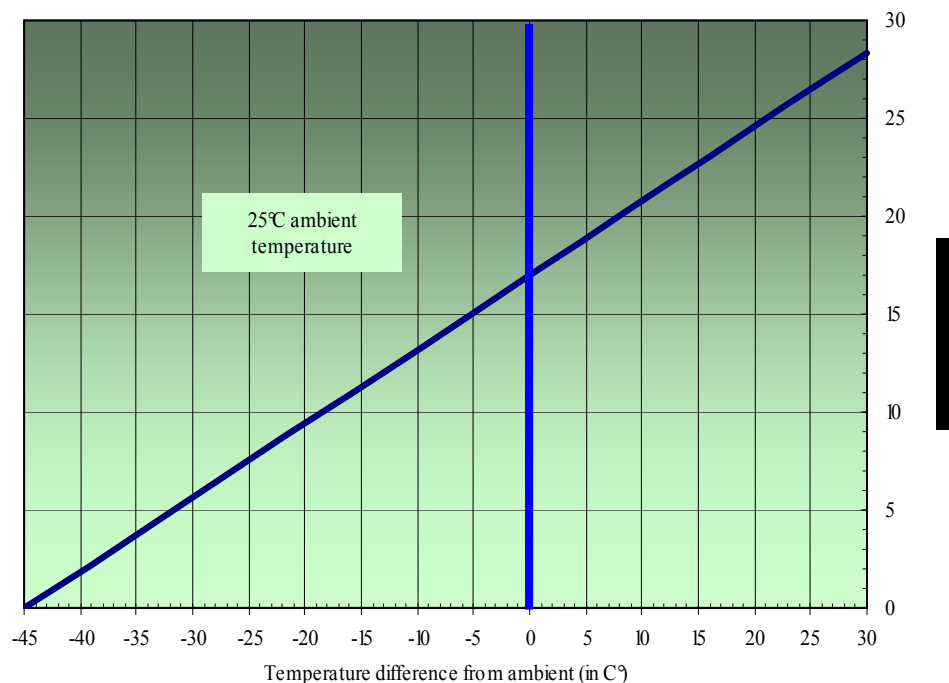
Performance Specification

Graph:

How to interpret the graph; to cool and object 20°C below the ambient temperature, the PK-1 can remove 9 watts of heat in an ambient operating temperature of 25°C. Or looking at it from another perspective; you have a component that consumes approximately 10 watts of electricity to operate, and that device is overheating. A PK-1 has the capacity to cool that device to 18°C below the ambient air temperature.

If your heat load and target temperature is within the area below the inclined line, the PK-1 is capable of providing the necessary cooling. If you need a specific temperature maintained below the inclined line, temperature control will be necessary. Consider using the TTC-12-24A Digital Temperature Controller with Plug-and-Play compatibility for this system.

PK-1 Performance



Conversions:

To convert temperature difference, multiply delta T °C by 1.8 for delta T °F

To convert heat pumped, multiply watts by 3.4 for BTU/HR

To convert millimeter to inches, divide millimeters by 25.4

Custom Cooling Engines

Your Tellurex thermoelectric heat pump is a standard designed pre-packaged cooling engine that is ready to deploy right out of the box. If it is not an exact match for your performance or fit/function needs, the Tellurex team is fully tooled and staffed to custom design a thermoelectric solution for you. We are an important resource to support your product planning process; research and development, prototype build and test, design for manufacture, pilot builds, and full production programs.

We are able to assess your design specifications, select the best components to meet your performance and cost targets, complete a low mass and compact subassembly to meet your needs.

Please contact our engineering and sales center to utilize these services or to discuss how we may support your program.

Contact us...we're ready to help:

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