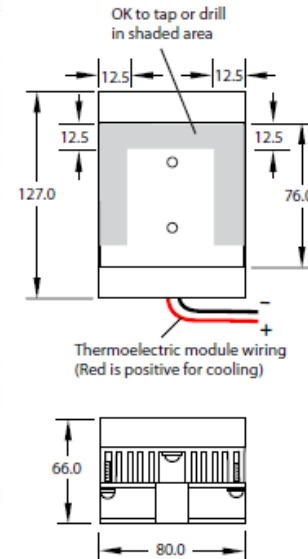
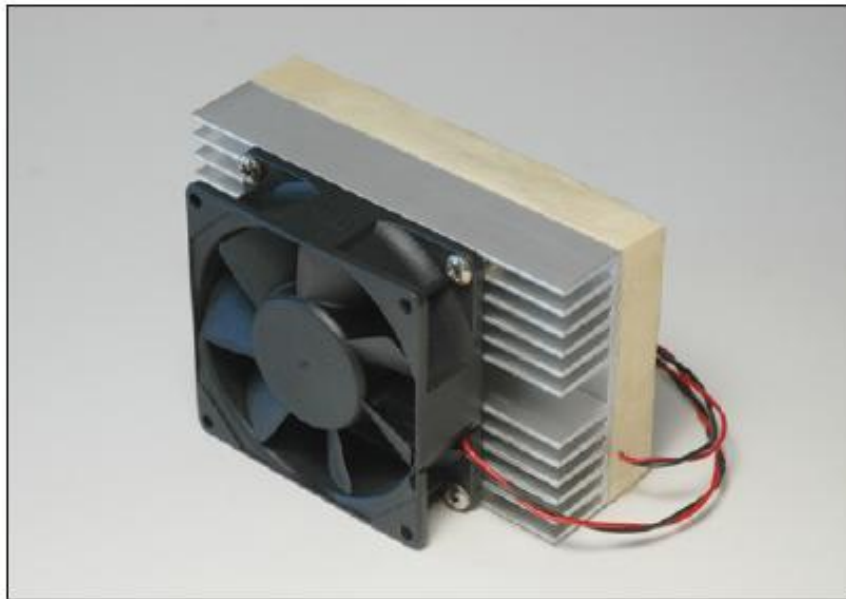


PK-1 Thermoelectric Cold Plate, Heat Pump

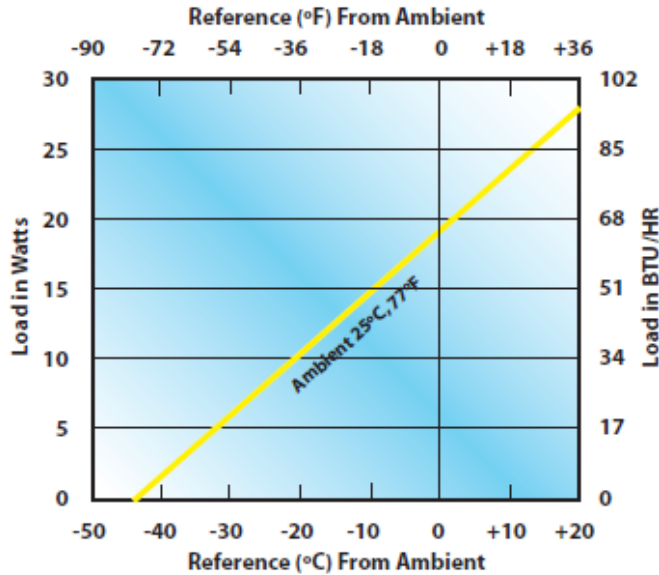


Note: All dimensions in mm

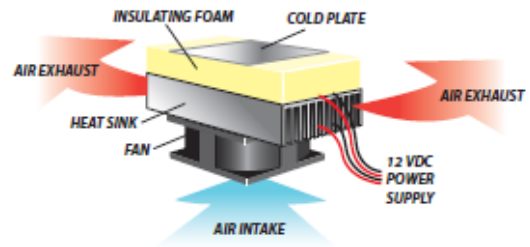
Features: The PK-1 is our smallest cold plate, ready to use as an educational tool or prototype component. A fully integrated thermoelectric heat pump assembly comes complete with a heat sink, fan, Z-Max® thermoelectric module and an interface plate. You can either cool or heat by reversing the current flow through the thermoelectric module, a built in thermal switch protects the unit from overheating.

The PK-1 is not formatted with “plug and play” features, however, the PS-12-6 is the appropriate size power supply for this unit, see customization note.

Capacity Rating:	17 watts, 58 BTU/hr @25°C, 0°C Delta T
Heating mode temperature:	85°C (thermostatic)
Dimensions:	127mm (5") x 80mm (3.15") x 66mm (2.6")
Applications:	contact cooling, prototype, educational tool
Power:	12 vdc, 4 amps (@25°C)
Weight:	584 grams (1 lb, 5 oz)
Ambient Operating range:	-10°C to 70°C
Materials:	Aluminum heat sink and contact plate, brushless DC fan
Mounting:	Mount in any orientation, (see diagram for drilling locations in contact plate)



Tellurex PK1 Cold Plate Cooler Performance Graph



PK1 Cooler Operation Illustration

Using the performance graph:

If an object is to be kept at 20°C below the ambient temperature, follow the x-axis “Reference (°C) from ambient” line to the -20° mark. Trace up from that point until it intersects the “ambient 25°C” line which indicates the performance of the heat pump. At that intersection trace over to the y axis to obtain the wattage capacity of the heat pump. If your heat load is smaller than that number, the heat pump is properly sized.

Customization Note: Customization to include appropriate terminals and wire harnesses which will make this unit compatible with the PS-12-6 power supply and the TTC-12-6F temperature controller is available through Tellurex Engineered solutions, inquire with the sales representative.