

# ThermoBank Prototype 4.0

Materials used:

Nylon- Light polymer plastic that is strong, durable, stretchy and flexible as well as breathable. The color black is used to absorb heat from sunlight while hiking.

Velco – Heavy duty Velco with stitched edges to maintain secure fit.

Thermo-electric generator (TEG 2) – Power scavenging design used to harvest electricity from low delta temperatures.

THE-2D-U Bi-directional ultra-low voltage converter- Amplifies thermos generated electricity. This device can take 45millivolts and convert it to between 5V-10V.

Power Supply Module w/ USB- Accepts DC voltage of .9 V and outputs a stable 5V.

ThermoBank pictures from development

1<sup>st</sup> prototype





2<sup>nd</sup> all new redesign



