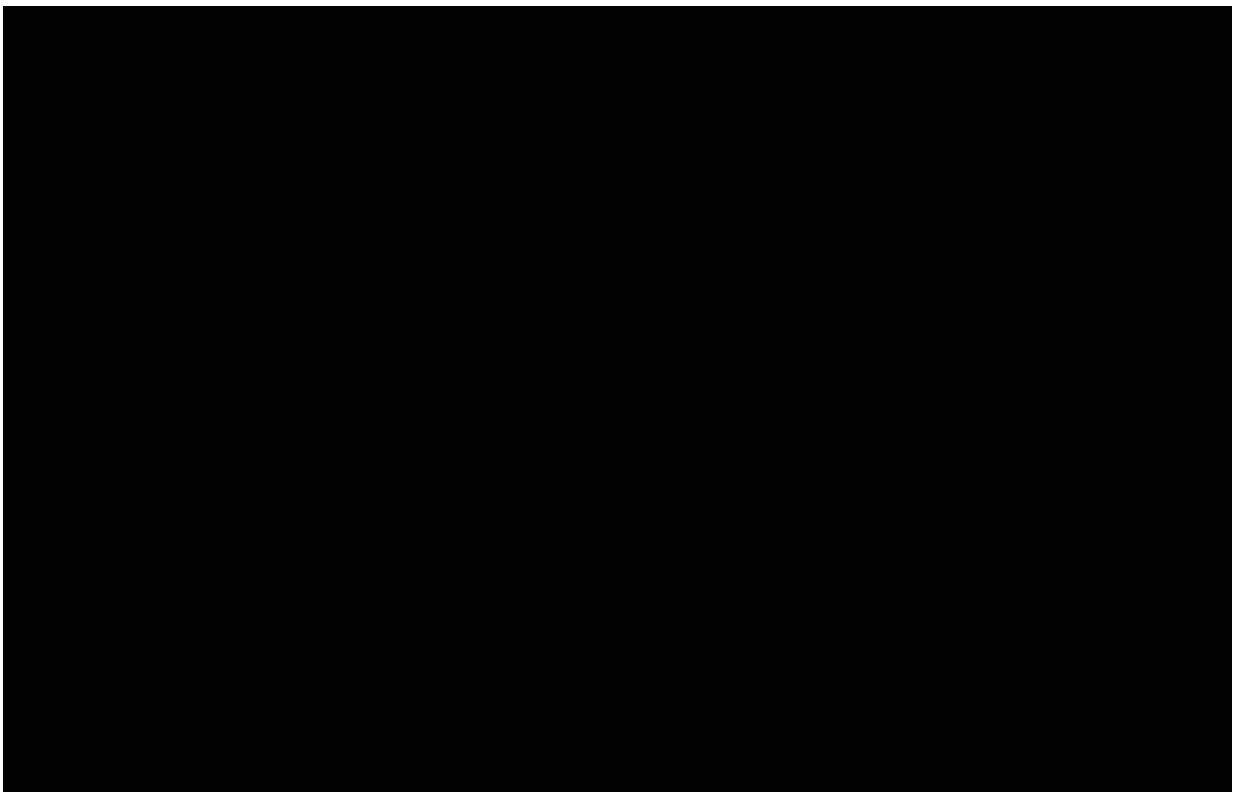


Flashlight powered by body heat sparks campaign dollars

October 19 2015, by Nancy Owano



How is this for hot response in a crowdfunding campaign. The project creator's goal was \$5,000. So far the campaign has gathered \$30,023 with 26 days to go.

What does not come as a surprise is that the product is all about batteries—or in this instance a [flashlight](#) that does not need any. No buttons. No batteries. The flashlight does not require any external energy [source](#).

This is a body heat-activated little flashlight which goes by the name of Lumen. New York-based Rost is the creator behind this product. He is an engineer; his work environment focuses on producing injection molds and parts for mining machinery. That is worth mentioning because as an engineer he is involved continually with products that are built to last. One might think of his flashlight as an eternal torch.

How it works: Touch Lumen and the heat of your body is converted to light.

He said, "when your temperature is 98 °F and air temperature is 82 °F Lumen produce about 15 mA@3v. When difference is bigger - excessive power is stored in a capacitor to power Lumen whenever you need it. Such amount of energy is enough to power 5 mm Cree led with 3000 mCd light output."

Joe Svetlik in *Trusted Reviews* talked about the technology that makes the flashlight work with no battery support: "It features a thermoelectric generator – basically a small ceramic bar – that produces a current when you place your thumb on it. The difference between your body temperature and the environment is enough to power a single LED. When the difference is bigger – you're extremely hot, or the environment is extremely [cold](#) – the excess power is stored for later."

If you needed to get hold of the flashlight in complete darkness, how could you find it, unless you remembered exactly where you left it? The inventor has an answer. You can order Lumen with tritium vial – a glass

tube with tritium gas inside the tube.

Lumen comes in two materials, titanium and aluminium. Both are available with or without Tritium tubes. Estimated delivery is February. A pledge of \$35 gets a Lumen with aluminum body, and the titanium number is \$45.

"As any Kickstarter project - I can experience temporary difficulties so some delays are inevitable. Though I have experience in mass production and will handle all problems in a timely manner," he stated. The tiny flashlight, he added, was only a first step in his research of green energy sources.

Reacting to the rising pledge totals so far, Rost wrote, "Whoa! It is an unbelievable experience when strangers from all over the Earth become your friends and help you to bring your dream to life. That's what I feel now!"

More information: www.kickstarter.com/projects/9...oesnt-need-batterie/

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