

FORM & FUNCTION

Form

Powerbank is composed of two basic elements. The first is a small electrical unit that connects a high-capacity home battery with a local electricity microgrid. This unit houses our innovative Intellimeter[™], which captures real-time data about the flow of power through your home, as well as data about the storage status of your home battery. The Powerbank unit can be customized to fit the decor of your home, or left as is in a utility space.

The second element of Powerbank is its online user interface, which is accessible through a browser or the native mobile application. Built by our team of skilled programmers and designers, Powerbank's UI is an online marketplace, a repository for your energy data, and a community forum.



Battery Charging Screen



Payment Screen









Function

Powerbank enables members of a community to commoditize energy that is generated and stored in their microgrid. Through our online platform, users can conveniently buy and sell energy from each other. Community members who generate energy may act as suppliers to other households. Those who buy energy may choose from whom and how often they do so, including the ability to automate transactions. Powerbank's online UI provides a suite of consensus-building and arbitration tools so that hyperlocal online marketplaces can be installed and moderated by community members. Additionally, Powerbank generates data that helps the community monitor transactions, to make the process as transparent as possible, while still respecting each household's privacy.

A Powerbank-enabled community creates a distributed system of energy storage in a microgrid where the majority of households have high-capacity batteries, and a handful of households have a power source (e.g., solar panels). Those who generate power retain ownership of the power they generate, even as the electricity they generate is distributed and stored in batteries throughout the local microgrid. Users who store the electricity generated by other households will be incentivized with energy credits.