

Energy Storage Report

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<http://energystoragereport.info/powerstation-247-concept-by-us-residential-solar-energy-storage/>

Start-up claims first true integrated home storage

Concept by US, a Florida, USA-based start-up, claims to have launched the world's first truly plug-and-play system for residential solar energy storage.

Two weeks ago the four-year-old firm unveiled an integrated storage unit called the Powerstation 247, which comes with up to three hybrid inverters, solar maximum power point trackers, a charge controller and lithium-ion batteries.

All the equipment is made by Concept by US except for the batteries, which are lithium iron phosphate products supplied by CALB USA and chosen for their safety properties.

To install the Powerstation, an installer just needs to plug the leads from a customer's solar panels in one end and attach it to the household distribution board at the other, said Sara Kissing, vice president and chief operating officer.

Most of the two to three-hour installation time is taken up by the battery management system software's automated setup process, she said.

Three variants all with 17.28kWh

The Powerstation comes in 5kW, 10kW and 15kW variants, all with 17.28kWh of storage and with a recommended retail price of USD\$29,000, \$33,000 and \$37,000, respectively.

Kissing said the price included installer margins but not installation costs, which could add around \$240 to the bill. US tax incentives might knock about \$10,000 of the price of the product, she told Energy Storage Report.

Powerstation's pricing seems a lot alongside offerings from competitors such as JuiceBox, which also claims a plug-and-play system, albeit without the inverter. JuiceBox is selling its system for around \$12,000 including Federal tax credit.

However, Kissing said the Powerstation's all-in cost would work out about 20% less than the cost of an equivalent system assembled using Tesla Powerwall battery packs and other off-the-shelf components.

"For a start, you can't use one Tesla battery," she said.



Two Powerwalls to match the Powerstation

A single Powerwall would not offer enough storage for a typical America home of up to 230m², she noted, and to match the Powerstation you would need at least two Powerwalls plus an inverter for each.

She said the 15kW Powerstation would have a payback period of between around six years in Hawaii and 15 years in Florida.

The Powerstation comes with a five-year warranty and is made up of two separate units that when stacked together occupy about the same space as a fridge.

Kissing confirmed Concept by US was scheduling the first installations for next month and had received interest from states including Arizona, California and Florida.

The company is planning expansion into Australia and Europe within a year. It is unclear how these growth ambitions will be financed, however.

Only one shareholder

Currently the company only has one shareholder, Owe Corbach, whose LinkedIn profile lists as a “visionary entrepreneur and investor” with a background in financial services, real estate and renewable energy.

Kissing said Corbach had bankrolled three years’ worth of research and development for the Powerstation and was not currently seeking further investors for the 15-strong business.

“We would be open, but are not looking,” she said.

Regardless of the question mark over Concept by US’s financial strength, its arrival on the energy storage scene highlights growing interest in the development of consumer products with an emphasis on simplicity.

JuiceBox is also claiming product integration and ease of use as a key differentiator, as is Sonnen.

Neither company offers products with a built-in inverter, although JuiceBox has developed software that can configure third-party inverters automatically.

Everything except the solar panels

Concept by US has evidently decided that consumers will want a system that goes one further and includes everything except the solar panels.

But it remains to be seen how this concept will stack up against companies that are already moving towards all-in-one solar-plus-storage packages for residential customers.

SolarCity, for example, has for the last year been offering a “turnkey residential solar battery backup system” combining its panels with Tesla Powerwall storage units.

And in Germany, the utility E.ON is this month due to start selling a PV-plus-storage package using Solarwatt’s MyReserve battery systems.

These major players will likely be able to lean on economies of scale to squeeze smaller suppliers on price.

Consumers, meanwhile, may prefer to get one company in to take care of all of their solar and storage needs... regardless of how easy it might be to set up a standalone battery system.