



Case Study: Tiny Tack House

OutBack Off-Grid Power System Installation



Overview

Chris and Malissa Tack are the owners of a truly “tiny home,” which they designed and built themselves in Snohomish, Washington. Through the wise, efficient use of space, the couple can enjoy comfortable and sustainable living in a 140-square-foot abode. Although the home is located in an area within reach of the traditional utility, the Tacks wanted the option to live off-grid, too. To start, they considered all of the devices they planned to have: a 4-gallon, low-frequency hot water heater, a refrigerator, LED lighting and two energy-efficient iMac computers. Next, they researched **renewable energy solutions that could deliver reliable power and connect to a generator when needed for battery recharging.**

System Specifications

Location: Snohomish, Washington

System Power: 1,020W Solar System

System Components: FLEXpower ONE (FX Inverter/Charger, FLEXmax Charge Controller, and MATE3 System Display and Controller)



The OutBack Power products were easy to install and are easy to use, and we've dramatically reduced the amount of power we consume. It feels great to tell people that we only purchase \$1 of electricity per day during the winter and produce most (if not all) of our power during the summer months."

Chris Tack
Homeowner



Objectives

- Select an integrated, easy-to-use solar photovoltaic (PV) system to power the tiny house.
- Ensure a consistent supply of electricity so that Malissa, who works as a freelance 3D artist, can work from home.
- Keep energy costs down to contribute to the overall economics of a tiny home investment.

Solution

In order to produce as much of their own electricity as possible, the Tacks considered several brands of inverters and charge controllers. OutBack Power products won out for two reasons. First, the Tacks wanted an integrated system and liked OutBack Power's end-to-end offering, which includes an inverter, charge controller, system display and communication manager—the “balance-of-system” necessary for PV. Second, the do-it-yourself nature of the tiny house project hinged on well-supported products. The Tacks were impressed by OutBack Power's customer service team, which delivered clear and concise answers to their numerous questions.

With the OutBack Power solutions in place, the Tacks have an extremely low electric bill and can stay disconnected from the grid for weeks or months at a time, without any need for a generator. Moreover, at the time they installed their system, the couple was able to take advantage of federal rebates and state incentives for solar power generation, which helped offset the system's cost.

Benefits

- The homeowners save on electricity costs year-round.
- The grid-interactive setup delivers electricity regardless of the state of the utility, so the couple has a consistently reliable power source.
- The high capacity inverter means that the system will support more demand as needed, even if the Tacks eventually decide to move it to a larger home.
- Using solar power has helped the Tacks become more aware of how and when they use power, which helps them live a truly greener life.