

Tiny Tack House

OFF-GRID CASE STUDY



SYSTEM SPECIFICATIONS

Location Snohomish, Washington

System Power 1020W solar system

Components FLEXpower ONE (FX inverter/charger, FLEXmax charge controller and MATE3 system display and controller)

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. They started by considering 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.

CHALLENGE

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

SOLUTION

- Install 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
- To offset the system's cost, the couple can take advantage of federal rebates and state incentives for solar power generation
- 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

OUTCOME

- The homeowners save on electricity costs year-round
- 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
- 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

