

Case study

TESVOLT & Studer off-grid system

Montpellier

France



The challenge

Offer a high-performance, sustainable and scalable solution to supply electricity to an isolated site in the Hérault département.



Perma-Batteries

Why STUDER

Robustness, 10-year warranty, easy commissioning, great product performance! The VS-70 + XTH solution is unique on the market and enables the addition of a single string solar field, while remaining in DC coupling, and benefiting from a higher voltage (from 100 to 600VDC). The TESVOLT + Studer combination is the most efficient for off-grid projects requiring capacity, reliability, performance and scalability.

System components

The system contains the following components:

- 1x TESVOLT TS40 14.4 kWh
- 2x VS-70
- 1x XTH-8000
- 1X Xcom-LAN
- 1x Xcom-CAN
- 1x RCC-03

The Solution

We opted for a zero-compromise system, consisting of the best components on the market: a Studer XTH-8000 Xtender inverter/charger, coupled via two VarioString VS-70 with 7400W of LG NeON R back-contact panels, with a 14.4 kWh TESVOLT battery with active BMS. We also included a backup generator (a 10kVA SDMO) controlled by the Studer based on the battery State of Charge (SOC). The product warranties offered (10 years for battery + electronics and 25 years for solar modules) safeguard the customer's return on investment. TESVOLT lithium storage systems (Samsung cells) are unique due to their active cell-balancing system, which allows the subsequent addition of modules after one year has elapsed following initial commissioning. They are built to last (> 8,000 cycles with a discharge of 1C, 100% DOD).

Project outcome

95% of yearly consumption covered using the system, lower generator unit usage, maximum reliability, and easier monitoring for the customer using the Studer smartphone application.

The Company

Perma-Batteries is the only company in France to offer energy self-sufficiency solutions integrating the most durable and efficient batteries on the market. We offer different types of batteries (BYD, Nickel-Iron, Pylontech, ENCELL, TESVOLT), as well as complete systems designed to meet your own needs and goals, in order to provide sound hardware solutions that are economically rational and built to last.

For more information please contact:

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