Briefing Note

NETfficient
Storage for Life

Second Life EV Batteries (WAE)

Name of the HW/SW technology: Second Life EV Batteries

Purpose of the HW/SW technology: Designed to store power from solar or renewable sources by a domestic or industrial user

Detailed description

System comprises of:

- A second life EV battery
- Grid-Tied inverter
- Battery charger
- WAE control electronics
- WAE Safety electronics
- Embedded PC for communication
- Remote Telematics System for diagnostics

The system acts to either divert power to the load, if load consumption is high; or store it in the battery if the solar panels are producing more than is being used by the load. This optimised the use of the renewable energy source.

The system can also produce power from both the solar panels and battery if the load consumption demands it.

Applications

The system intelligently monitors power generation & consumption by measuring:

- Power demand from the home/business (Load)
- Power produced by solar panels
- Available capacity of the battery

This information generated can then be communicated via:

- Internet connection to embedded PC
- Remote Telematics system for GPS tracking and data collection

Owners have a net cost saving due to the discrepancy between the solar feed in tariff and the normal electricity price (£ per kWhr), or have off-grid backup storage power available.

Technical specification

- 24KWhr Battery size – effective useful SoC 60%
- Full charge capacity of approx. 18KWh
- Maximum output power @ 240VAC = 5 KW
- Maximum battery output @360VDC = 2 KW
- Maximum battery charge rate @360VDC = 5 KW
- Operational range = +5 - +35C

Images, drawings

Company Name & Details

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