

Backup power supply system for residential and household facilities using an electric vehicle comprises an electric vehicle equipped with a battery and an electrical power conversion unit designed to charge the battery from an external power grid and supply electricity to the internal power grid of the facility. The electrical energy conversion device is located in the electric vehicle and consists of a charging inverter, a discharging inverter, and an inverter switching unit. The electric vehicle is connected to the external and internal power grids via a single input connector. The system additionally includes a logic control unit and a switching unit, both housed in a separate distribution unit. The logic control unit is designed to monitor the presence of voltage in the external power grid and generate a signal to control the switching unit and the inverter switching unit, with the ability to automatically switch to backup power mode when the power supply is interrupted and to charging mode once it is restored.