

powerguard

Grid-Boost for Electric Vehicle Charging

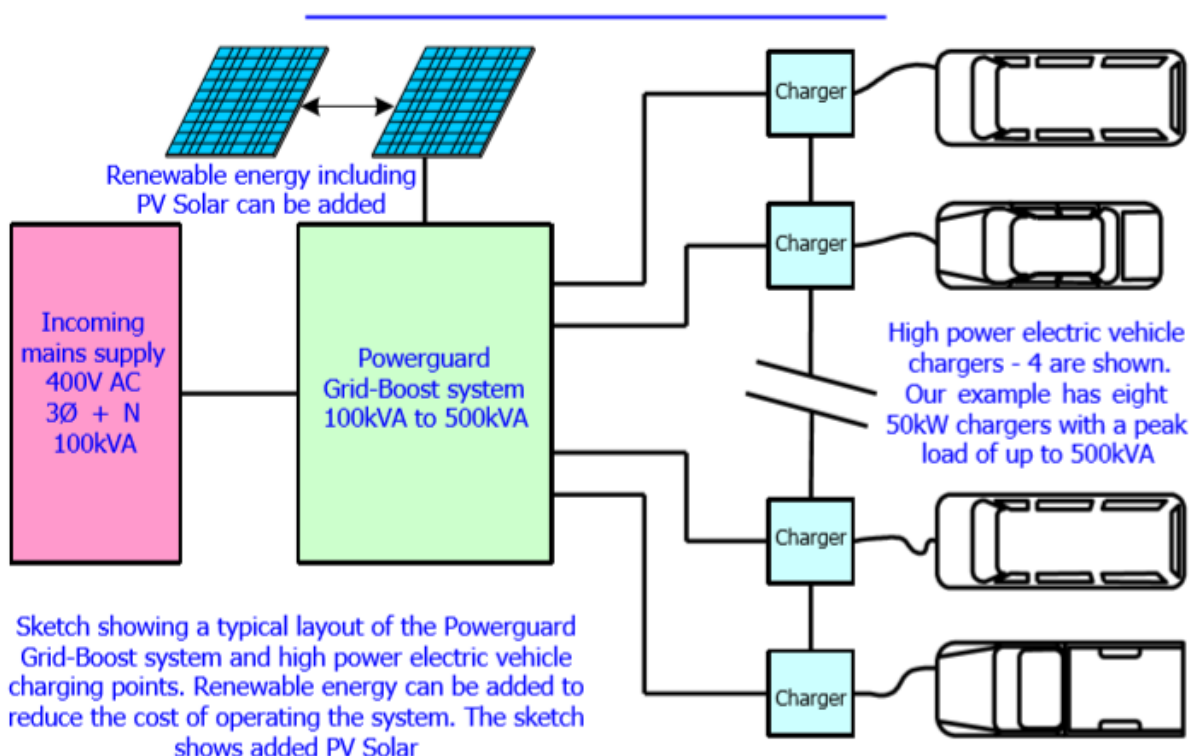
The Powerguard Grid-Boost system is an energy store installed between the mains supply and the load. It is designed to enable the load, usually electric vehicle fast chargers, to be powered from a grid supply that cannot supply enough power during peak demand.

For example, if there is a requirement for eight 50kW vehicle chargers with a total load of just under 500kVA and the mains can only supply 100kVA, the Powerguard Grid-Boost system is can act in its stead.

The Powerguard Grid-Boost system is manufactured to supply power to any combination of high-power electric vehicle chargers including 22kVA, 43kVA, 25kW, 50kW, 100kW and 150kW rating.

How Does Grid-Boost Work?

The system consists of a high capacity battery, two chargers and two high power inverters. The power management system handles the control, and the information is shown on a menu-driven display. If the demand is too high, then the chargers will be restricted in a controlled way until the incoming power catches up.



The system takes advantage of the fact that the chargers will not be in use at the same time all the time.

The chargers will also not take full power all the time because as the vehicle battery charges, the power will reduce.

