

# Battery Charger Solution



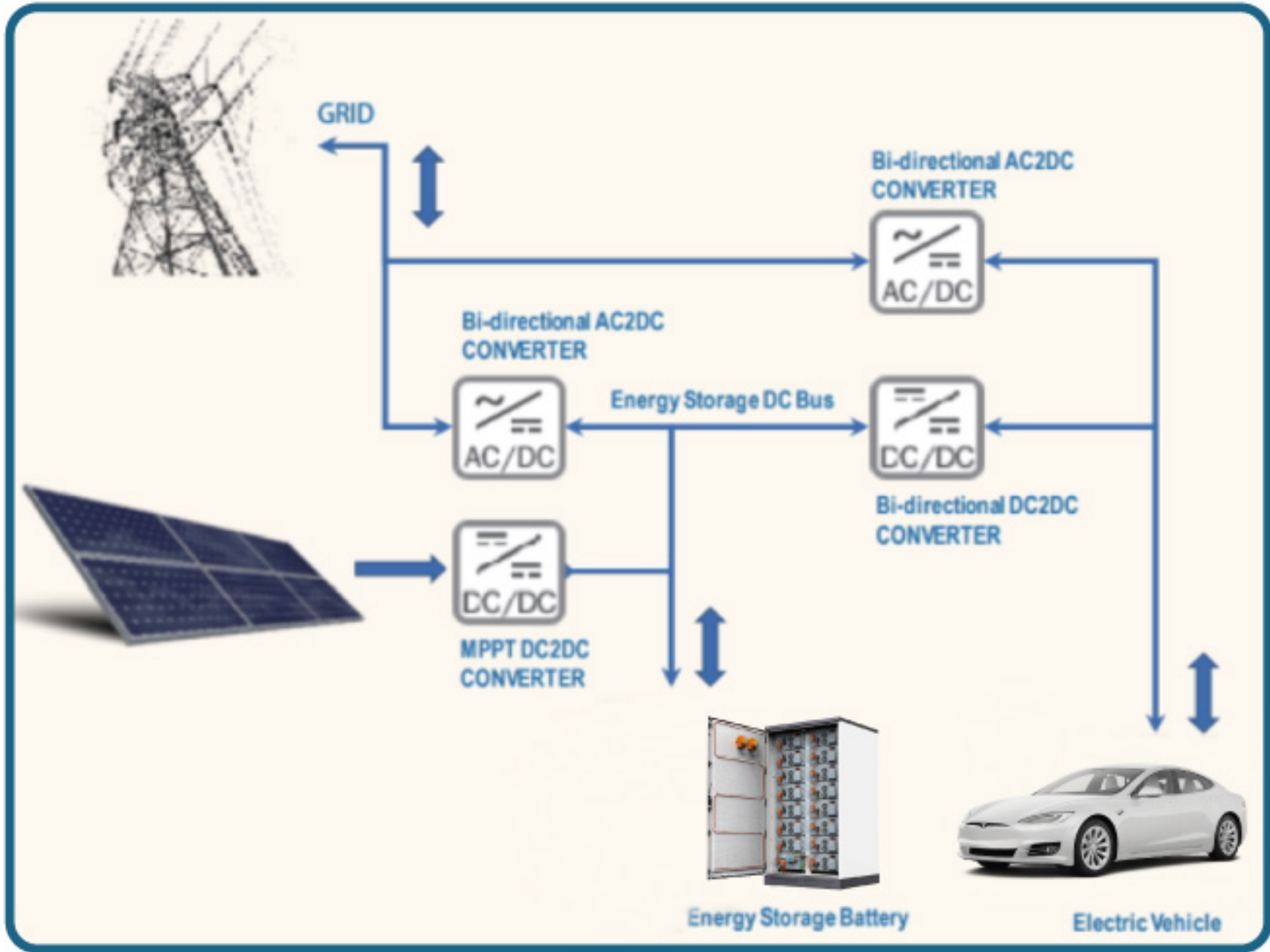
## Main Features

- Total electric insulation between the grid, battery, EV, and new energy input
- Full compatible between different system configuration
- Flexible change the system configuration capacity and power direction
- Differentiation battery group configuration and access
- Unify EMS strategy
- HPC 500A charging support

Model	215kWh Battery Cube
Battery Rack	15 pcs IBP14K51S 280Ah battery pack in series for energy storage application, 14 pcs in series for energy storage charger application
Battery Rack Capacity	215kWh/280Ah for energy storage application, 200kWh/280Ah for energy storage charger application
Battery Rack Voltage	672V~864V for energy storage application, 627V~806V for energy storage charger application
Charging/discharging ratio	0.5C discharge / 0.5C charge, 1C discharge with 10 min
High Voltage Control Box	IBU280A1K high voltage control box
Battery BMS	2 level BMS structure: Battery Pack BSU + High voltage control box master-slave BMU, max 4 BMU parallel working
Battery Capacity Expand	Max 4 groups battery/battery cube parallel work to get max 0.86MWH capacity
Thermal Management	Outdoor industry cool and heat air condition application, Intelligent partition thermal management
Temperature uniformity	≤5°C@0.5C rated dis/charge ratio between all cells in the cube
Fire suppression system	Temperature-activated fire extinguishing system + fire probe tube
Air pressure release system	Air pressure sensor and valves, emergency fan, safety directional pressure release area and structure
Safety Sensor	Door access sensor +Smoke detector + Tilt alarm detector + Harmful gas detector
Environment Sensor	Water sensor + Temperature sensor + Humidity sensor
HMI interface	CAN2.0, RS485 Modbus, Alarm light and bell
BMS precision	SOC, SOE ≤5%
BMS other function	SOH, SOS, instant data recorder, fault snapshot
Protection Class	IP65
Dimension	1200 x 2200 x 1200 (mm)/1400 for the air condition deep
Weight	1600 kg （Full battery configuration）
Noise	≤65 dB
Certification	TUV CE: IEC 62619, IEC61000-6-2/4, IEC62477, TUV functional safety: IEC60730-1 AH-CLASS B. GBT36276 TUV UL: UL9540A, UL9540, UL1973



The Battery Charging Solution use the Lithium battery groups to store energy. It can balance and maximize the power supply and power usage between the grid, battery, EV charging and renewable energy input. By managing the energy level of battery, the solution could perform peak shaving, grid expansion, and make use of renewable energy. It is also the smart grid core access point with the V2G / V2X / B2G functions in this solution.



## Solution Value

- Peak shaving
- Grid expansion
- Grid quality and reliability improvement
- Emergency power supply
- Renewable energy convenient access
- User side energy storage B2G integration
- V2G/V2X realize

\*Optional