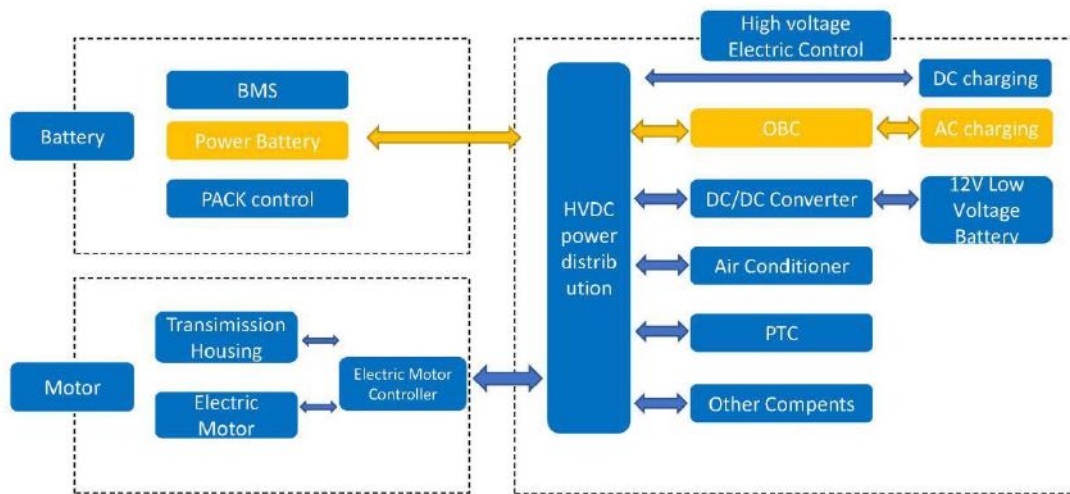




On-board Charger

- On-board Charger (OBC) Function

The basic function of the on-board charger is that the grid voltage is connected to the on-board charger through the ground AC charging pile and the AC charging port to slowly charge the on-board power battery.



- Product Information

At present, a complete set of solutions can be provided for use in: BEV, PHEV, hybrid electric vehicles (HEV). There are mainly two output voltage ranges: 200-420V for passenger cars, small logistics vehicles, 400-680V for commercial vehicles, large logistics vehicles, which can use 3.3KW 6.6KW solutions.

Product Parameters		Picture
Input voltage range	200Vdc – 750Vdc	
Power	800W-4000W	
Output voltage range	18Vdc - 36Vdc	
Efficiency	>96% @ 100% load	
Topology	PSFB/Interleaving Boost+LLC	
Communication	CAN	
Protection Level	IP67	
Cooling Way	Water cooling / Air cooling	
Altitude	3KM	
Design Topology	15 Years/15000H	
Application	Commercial Vehicles and Passenger Vehicles	



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- **Technical Advanges**

1. Efficiency: higher than 95%, does not affect efficiency in ambient temperature 85°

2. Input pre-charging circuit: Effectively prevent input overshoot current and prevent circuit breaker from malfunctioning.



3. Full-bridge LLC resonance: LLC soft switching technology is adopted to effectively improve efficiency and reduce EMI. The overall efficiency is 95%, meeting the requirements of EN55022

4. Output reverse connection protection circuit: effectively prevent damage to the charger caused by reverse connection, causing secondary damage to some components of the vehicle, and improve safety performance.

5. High reliability: highly integrated modular products + small size

6. Using automotive-grade MCU, compatible with digital and analog control functions, cost-effective to achieve stability and safety of the car's on-board power supply.