

Vehicle Interface Box

The intelligent interface between battery system and vehicle



The Vehicle Interface Box (VIB) enables the battery scalability, acting as an efficient interface between multiple battery packs and the vehicle. This ultimate box comprises the functions of power distribution unit, master BMS and safety fuses in one robust packaging.

As the main control unit for the entire battery system, the VIB enables the connection of up to 10 CV Standard Battery Systems with a system output of 400 or 800 V. This creates a modular battery system that can be adapted to the needs of many different vehicle types.

Standards & norms:

- Homologation: ECE R10
- CE-mark: CE certified for mobile machines*
- **Safety:** ISO 6469, ISO 26262 (ASIL C), ISO 17409
- Environment: ISO 20653 (IP67/IP6K9K)
- Vehicle Communication: CAN Bus conform to ISO 11898. Signal mapping to SAE J1939 upon request. (Signal security requires alignment with Webasto.)
- Company Standards: LV 123, LV 124
- **EMC:** ISO 11452, ISO 7637, CISPR 25

Additional standards & norms**:

ECE R100, UN GTR No.20, ISO 16750, ISO 12405, ISO 19453

All advantages at a glance:

- Intelligent main control unit enables scalability of the battery system
- Configuration of up to 10 CV Standard Battery Systems possible
- Tailored to the requirements of commercial vehicles and mobile machines
- Central CAN communication interface between battery and vehicle
- Developed to highest safety standards

Technical specifications:

- Intelligent switching concept and central battery pack balancing
- Direct connection and integrated fuse protection for further loads
- Central coordination and monitoring of isolation measurement
- Cable protection for power trains and auxiliary components
- Designed to enable DC charging and connection for onboard charger available (AC charging)
- Evaluation of the high voltage interlock



Technical specifications

	VIB
Product dimensions (L x W x H) (mm)	548 x 686 x 155
Weight (kg)	42
LV supply voltages (V)	12 and 24
HV supply voltages (V)	400 & 800 systems
Scalable energy with CV standard batteries (kWh)	35 – 350 (max. 10 packs)
Scalable power (kW)	up to 460
Continuous current DCH (A)	380
Continuous current CH OBC (A)	67
Continuous current CH DC fast charging (A)	200
Peak current DCH (30 sec.) (A)	580
Peak current recuperation (30 sec.) (A)	500
Operational temperature (°C)	-40 to +85

