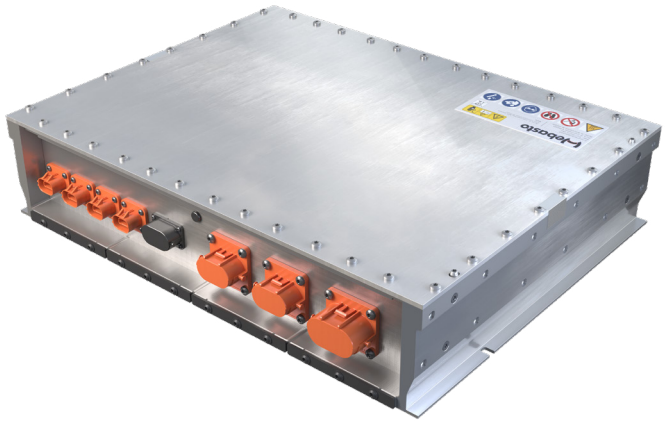
Webasto
Feel the Drive

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 Standardized 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.

All advantages at a glance:

- Intelligent main control unit enables scalability of the battery system
- Configuration of up to 10 Standardized 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

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.
- **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

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

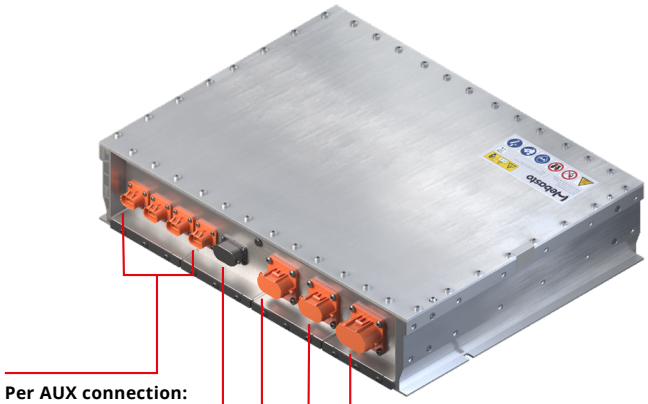
* CE certified for various vehicle types (listing upon request)

** Tests & requirements partially fulfilled

Truck | Light vehicles | Bus | Special vehicle | Recreational vehicle | Off-Highway | Agricultural | Airport | Material handling

Technical specifications

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



Per AUX connection:
Continuous current: 20 A
Peak current: –

Onboard AC charging
Continuous current: 67 A
Peak current: –

Per connection: Powertrains/ Recuperation
Continuous current: 150 A
Peak current: 250 A

DC charging
Continuous current: 200 A
Peak current: –

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