

# CV Standard Battery System

Scalable Battery System Designed for Commercial Vehicles



## Features:

- Modular system with 35-350 kW/h storage
- Designed specifically for commercial vans, trucks & buses
- Configurable for 400 V and 800 V
- Available thermal management system for optimum performance
- Advanced electronics with remote monitoring available
- Liquid cooling with connectors outside the pack
- Desiccant cartridges to reduce condensation
- Integrated thermal runaway detection in each system
- State-of-the-art pressure equalization for added safety

The Webasto CV standard battery system is designed specifically for the commercial vehicle market. This high quality system boasts robust packaging, modular design and an efficient cooling interface. Coupled with Samsung SDI state-of-the-art cell technology.

Webasto CV standard battery was designed to be the perfect solution for many commercial vehicle applications: light-medium duty, bus, heavy duty on and off-highway vehicles.

## System requirements and the environment

- Optimized for vehicle classes M1, M2, M3, N1, N2 & N3 (EC Directive 2007/46)
- Developed for EU28 as well as Switzerland, Turkey and Norway
- Designed for an ambient temperature of -30 °C to 60 °C, 3,500 meters above sea level and 0 – 100 % humidity

## Norms and standards

- **Homologation:** ECE R100, ECE R10, UN GTR No. 20
- **Transport:** UN T38.3 (Transport of Dangerous Goods)
- **Safety:** ISO 6469, ISO 12405, ISO 26262 (ASIL C)
- **Environment:** ISO 16750, ISO 19453, ISO 20653 (IP67 / IP6K9K)
- **Vehicle communication:** ISO 15031, SAE J1939, SAE J1979
- **Company standards:** LV 123, LV 124
- **EMC:** ISO 11451, ISO 11452

## Technical specifications

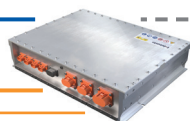
	Battery pack
Dimensions (L x W x H) (mm)	960 x 686 x 302
Weight (kg)	295** per pack
Installed energy (kWh)	35
Voltage range (V)	280 – 400 (~350 nominal)
Energy density	~203 Wh/l, >118 Wh/kg
Continuous use (CH/DCH) (kW) (@25 °C, SoC dependent)	50/56
Maximum performance (CH/DCH) (kW) (30s, @25 °C, SoC dependent)	116/112
Lifetime (@80 % DoD, 25 °C, 1C/1C)	>3,000 cycles*
Calendric lifetime (Years)	8
Volume flow per battery pack (l/min.)	10
Pressure loss per battery pack (mbar)	<50
Cell type	prismatic NMC

\* SoC, voltage, temperature, & DoD dependent \*\* Dry weight



CV Standard  
Battery

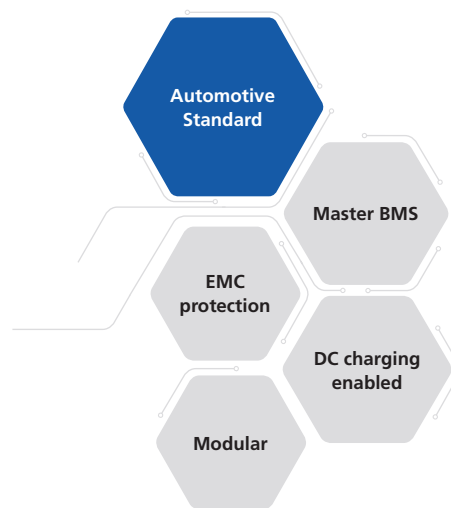
Powertrain  
& Consumer



Vehicle Interface Box

- Central analysis and evaluation of individual packs
- Summary of overall system limits

Expandable  
up to 10 Batteries\*  
(350 kW/h)



Possible system specifications	400 V / 800 V (2 Packs)	400 V (3 Packs)	400 V / 800 V (4 Packs)	400 V (5 Packs)	800 V (max. 10 Packs)
Pack topologie in 400 V / 800 V system	1s2p / 2s1p	1s3p	1s4p / 2s2p	1s5p	2snp
Energy content (entire system)	70 kWh	105 kWh	140 kWh	175 kWh	350 kWh
Continuous use (CH/DCH)*	76 / 104 kW	114 / 156 kW	152 / 208 kW	190 / 260 kW	n * 38/n * 52 kWh
Maximum use (CH/DCH)*	230 / 300 kW	345 / 450 kW	460 / 600 kW	575 / 750 kW	n * 115/n * 150 kWh

\*Energy & Power can be scalable via customized solutions



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