

Hybrid



Electric

Explore our Technologies

Battery Packs

for Commercial Vehicles

Battery Packs

COMPACT BATTERY PACKS FOR COMMERCIAL VEHICLES

that perform better and last longer thanks to industry-leading energy density and battery management. Battery packs are part of BorgWarner's joint venture with Romeo Power Technologies. These packs feature standard cylindrical cells in compact designs for exceptional energy density. Developed with proprietary thermal engineering and battery management expertise, they aim to provide breakthrough range and performance capability. The scalable designs can be tailored to specific customer needs and enable speed-to-market for manufacturers.

Specifications V1

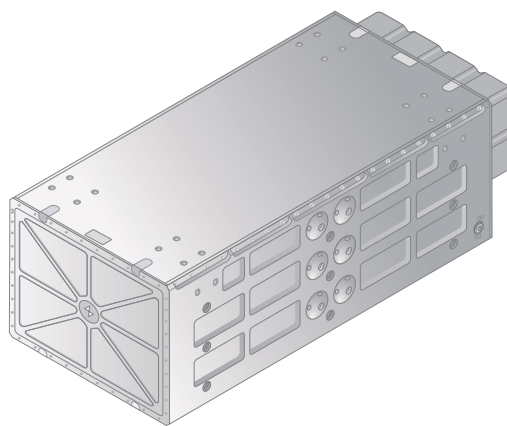
	Single Pack	Parallel Configurations
Application	Heavy Duty Bus & Truck	
Configuration	3S1P (Hermes 32s)	Varying # Packs in Parallel
Capacity (total)	30 kWh 172.8 Ah	Scales with # Parallel Count
Voltage Range, Operation Open Circuit	240 to 403 VDC 288 to 393.6 VDC	
Continous Power	45 kW (discharge) 9 kW (charge), 27 kW (regen)	Scales with # Parallel Count
Peak Power	120 kW (10 sec; discharge) 90 kW (10 sec; regen)	Scales with # Parallel Count
Operation Temp	-20 to 60°C (discharge) 0 to 50°C (charge)	
Dimensions (Single Pack)	895 (L) x 466 (W) x 344 (H) mm Add 100 mm to (L) for A, to (W) for B	
Volume	143 L	Scales with # Parallel Count
VED	210 Wh/L	
Weight	180 kg	Scales with # Parallel Count
GED	167 Wh/kg	
BMS Architecture	Internal Distributed Master/Slave, CAN per J1939	

Specifications V2

	350v Nominal Pack	700v Nominal Pack
Application	Heavy Duty Bus & Truck	
Configuration	6S1P (Hermes 16s)	6S1P (Hermes 32s)
Capacity (total)	60 kWh 172.8 Ah	60 kWh 86.4 Ah
Voltage Range, Operation Open Circuit	240 to 403 VDC 288 to 393.6 VDC	480 to 806 VDC 576 to 787 VDC
Continous Power	90 kW (discharge) 20 kW (charge), 54 kW (regen)	
Peak Power	240 kW (10 sec; discharge) 180 kW (10 sec; regen)	
Operation Temp	-20 to 60°C (discharge) 0 to 50°C (charge)	
Dimensions (Single Pack)	900 (L) x 466 (W) x 629 (H) mm Add 100 mm to (L) for A, to (W) for B	
Volume	273 L	
VED	220 Wh/L	
Weight	375 kg	
GED	160 Wh/kg	
BMS Architecture	Internal Distributed Master/Slave, CAN per J1939	

Features & Benefits

- Intelligent battery management systems with proprietary algorithms for enhanced performance and cycle life
- Proprietary thermal engineering for active and passive cooling
- Scalable design means faster go-to-market for customers with custom modules
- Highest energy density, longest range and fastest charging time
- 2,000+ cycles
- 10+ years
- 300,000 miles



Specifications V3

	5 Module Pack	6 Module Pack
Application	Heavy Duty Bus & Truck	
Configuration	5S1P (Hermes 32s)	6S1P (Hermes 32s)
Capacity (total)	50 kWh	60 kWh
Voltage Range, Operation Open Circuit	400 to 680 VDC 480 to 656 VDC	480 to 806 VDC 576 to 787 VDC
Continuous Power	75 kW (discharge) 17 kW (charge), 45 kW (regen)	90 kW (discharge) 20 kW (charge), 54 kW (regen)
Peak Power	200 kW (10 sec; discharge) 150 kW (10 sec; regen)	240 kW (10 sec; discharge) 180 kW (10 sec; regen)
Operation Temp	-20 to 60°C (discharge) 0 to 50°C (charge)	
Dimensions	900 (L) x 900 (W) x 340 (H) mm	Plus External Junction Box 466 (W) x 340 (H) x 100 (L) mm
Volume	275 L	291 L
VED	182 Wh/L	206 Wh/L
Weight	325 kg	375 kg
GED	154 Wh/kg	160 Wh/kg
BMS Architecture	Internal Distributed Master/Slave, CAN per J1939	

Specifications V4

	8S Single Pack	3P Solution
Application	Heavy Duty Bus & Truck	
Configuration	8S1P (Hermes 24s)	8S3P (Hermes 24s)
Capacity: Total Useable	80 kWh 65.6 kWh	240 kWh 196.8 kWh
Voltage Range, Operation Open Circuit	480 to 806 VDC 576 to 787 VDC	
Continuous Power	120 kW (discharge) 27 kW (charge), 72 kW (regen)	360 kW (discharge) 80 kW (charge), 216 kW (regen)
Peak Power	320 kW (10 sec; discharge) 240 kW (10 sec; regen)	960 kW (10 sec; discharge) 720 kW (10 sec; regen)
Operation Temp	-20 to 60°C (discharge) 0 to 50°C (charge)	
Dimensions	Within 850 (L) x 560 (W) x 720 (H) mm	
Volume	343 L	1,028 L
VED	233 Wh/L	
Weight	500 kg	1,500 kg
GED	160 Wh/kg	
BMS Architecture	Internal Distributed Master/Slave, CAN per J1939	

For additional information:
borgwarner.com

