

Hybrid electric military vehicle battery (HEMV)

Rechargeable lithium-ion battery system

High power lithium-ion battery system for hybrid electric military ground vehicles

Saft's HEMV battery system provides power to the vehicles' engine while it is not relying on fuel. The battery is comprised of between 5 and 8 high power VL 34P Li-ion modules, depending on the specific power needs of the application.

Saft supplies complete energy storage systems customized as needed to meet customer specifications.

Benefits

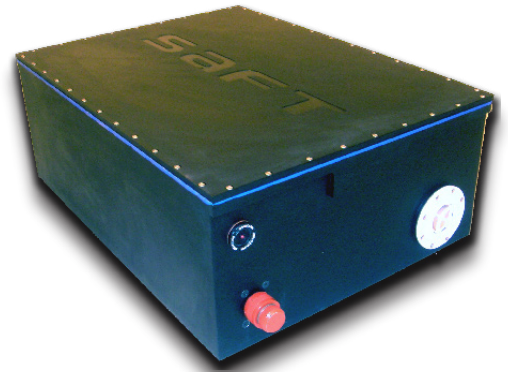
- Very high specific energy
- Very high power
- Maintenance free
- Light weight
- Fast re-charge
- Low life cycle costs
- Reliable and safe

Features

- Air cooling with optional liquid cooling
- Carbon negative
- Nickel oxide-based positive
- Integrated electronic management system
- CanBus communication interface with vehicle
- Can be configured with differing numbers of modules depending on power needs (see Doc N° 32016-2-0607 for more information on the VL 34P module)

Applications

- Hybrid electric military vehicles
- Defense
- Exportable power
- Silent watch
- Propulsion
- Applications requiring a combination of power and energy



Electrical characteristics	HEMV-5	HEMV-7
Nominal voltage at 50% SOC	219 V	307 V
Charge limit	246 V	344 V
Discharge limit	150 V	210 V
Maximum continuous current at 25 °C*	200+ A	
Peak power at 50% SOC*	98.3 kW	138 kW
Continuous power at 50% SOC*	53 kW	74 kW
Energy	6.6 kWh	9.2 kWh
Specific energy	66 Wh/kg	
Capacity	30 Ah	
Impedance at 5 sec (250 A discharge)	65mΩ	85 mΩ
Mechanical characteristics	HEMV-5	HEMV-7
Weight	220 lbs / 100kg	310 lbs / 140 kg
Height	9 in / 229 mm	
Width	18.5 in / 470 mm	
Length	25 in / 635 mm	35 in / 890 mm
Operating Conditions	HEMV-5	HEMV-7
Operating temperature	-30 °C to +60 °C	
Storage and transportation temperature	-40 °C to +65 °C	

**Power and current ratings dependent upon cooling conditions and fuze sizing*

Saft

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