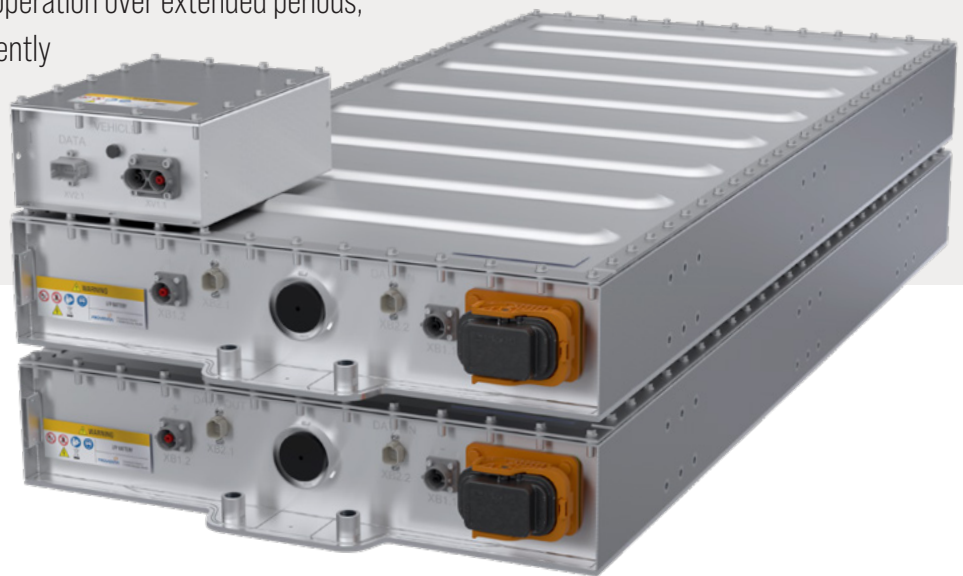


PROVENTIA ENERGY BATTERIES



HIGH-VOLTAGE LFP BATTERY SYSTEMS

Proventia modular high-voltage LFP battery packs are designed for full electric applications and can be configured from 190V up to 1000V. Standard packs are available in configurations of 5, 6, or 8 modules that can be connected in series to reach the desired system voltage. Engineered for continuous operation over extended periods, these packs perform excellently in extreme temperatures.



KEY FEATURES

- Compact and robust construction
- IP67 rating
- Stainless steel housing
- Remote monitoring available
- Pressure equalizer vent for added safety
- Water-glycol cooling integrated into the enclosure to minimize leaks
- Heavy-duty automotive-grade BMS system
- Multi-string support for up to 10 pcs of parallel-connected battery systems
- Low carbon footprint
- Made in Europe

BENEFITS

- Thermally stable and environmentally friendly
Lithium Iron Phosphate chemistry (LFP)
- Excellent lifetime (up to 6500 cycles)
- Discharging possible between [-20...+55°C]
- Charging possible between [0...+55°C]
- Wide usable SOC range
 - Excellent input/output characteristics over a wide SOC range of 0-100%, making it possible to reduce the nominal battery capacity or the number of batteries necessary for a system

CONTACT US

Interested in our products and services?
Give us a call or send an email!



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HIGH-VOLTAGE LFP BATTERY SYSTEMS

TECHNICAL SPECIFICATIONS

Lifetime	> 6500 cycles ¹
Cell type	Prismatic LFP
Charge continuous current	100A ²
Discharge continuous current	200A ²
Self-discharge	7.5% [90 days] ³

¹ SOH70% - Cycle characteristics depend on cycle and usage conditions.

² Cell temperature should not exceed the maximum operating temperature.

³ 25 °C starting state of charge 25%

OPERATING CONDITIONS

Discharging temperature range ¹	-20...55 °C
Charging temperature range	0...55 °C
Storage temperature (max recommended)	-20...45 °C
Storage Humidity	< 70%

¹ The stated operation temperature range is valid without active thermal management.
Operation beyond this range is possible with properly designed heating/ cooling system.

SYSTEM LEVEL DESIGN AND VALIDATION

- IEC 62619 Industrial li-ion battery safety
- IEC 60664-1:2020 Clearance and creepage
- IEC 62485-6 Safe operation of traction batteries
- UN 38.3
- ISO16750 1-4 on component level
- EN 60529 IP 67
- REGULATION 2023/1542 (EU Battery Regulation)

TYPICAL APPLICATIONS

For full electric and hybrid applications:

- Mining & construction
- Material handling
- Agricultural
- Marine & offshore applications
- Rail and heavy-duty transport systems
- Backup power and stationary energy storage
- Industrial machines in high vibration environments

ELECTRICAL CHARACTERISTICS

	5M	6M	8M
Nominal voltage [V]	192	230	307
Capacity [kWh]	19	23	31
Continuous power [kW]	19	23	31
Peak power [kW]	38	46	61

PHYSICAL DIMENSIONS

Width [mm]	750	750	750
Length [mm]	1106	1291	1661
Height [mm]	170	170	170

Note: All specifications are subject to change without prior notice.