**Li-Ion Battery UPS**

*Li-Ion* UPS technology

A compact innovative power protection solution
Increased power storage availability and reduced Total Cost of Ownership

Ensuring permanent power supply to electrical infrastructure for business continuity whilst reducing the Total Cost of Ownership is a main concern for data centres. LI-ION BATTERY UPS – Socomec’s latest innovative UPS solution – provides reliable back-up power availability in a reduced footprint, with extended life time and reduced maintenance.

Increased availability
The uptime of mission critical applications is a major concern for IT or data centre managers. Based on the latest technologies, Socomec LI-ION BATTERY UPS provides higher power density and faster recharges than lead-acid systems. To maximise the power system’s availability and reduce the consequences of spurious battery failure, LI-ION BATTERY UPS is equipped with an embedded interactive control system that provides accurate and individual cell monitoring.

Higher value space, reduced TCO
Thanks to their high energy density, LI-ION BATTERY UPS systems saves space and are lighter than lead-acid battery UPS. LI-ION BATTERY UPS allows a more effective and flexible use of the space, leaving free space for additional IT equipment or additional rooms to accommodate future power upgrades. Less sensitive to higher temperatures, LI-ION BATTERY UPS requires less cooling and hence reduces energy costs.

The solution for
> Data centres
> IT infrastructures
> Applications requiring a back-up time up to 15 minutes

Why choose Socomec?

• Independent manufacturer
  Founded in 1922, 3000+ employees, 30 subsidiaries across five continents.

• Specialist
  Solutions for power availability, control, safety and energy efficiency.

• Expert
  Manufacturer of energy conversion solutions for over 40 years.

• At your service
  A global network of consulting, inspection and maintenance teams.

• Flexible
  Adapted solutions to suit the specific needs of our customers.

• Innovative
  Nearly 10% of the sales turnover is dedicated to R&D.
The advantages of the LI-ION BATTERY UPS solution

Maximum availability
- Very fast UPS battery recharge.
- Ensured scalability for power upgrades or redundancy.
- Reduced maintenance of battery components.

Extreme reliability
- Optimum performance in all critical operating conditions.
- Interactive UPS battery control.
- Embedded cell-to-cell monitoring.
- Wide operating temperature range (0 °C to +40 °C).

Cost-effective solution
- High power density in a reduced footprint.
- 15+ years’ expected service life.
- Higher cycling capacity: 10 times more than VRLA Battery UPS
- Fewer cooling requirements.

LI-ION BATTERY UPS: footprint comparison with VRLA batteries

Back-up storage solution with VRLA batteries

Back-up storage solution with LI-ION BATTERY UPS

UPS interaction
The ultimate solution for fuller control over system availability. The Socomec LI-ION BATTERY UPS solution includes an interactive control system to check and manage all the Li-Ion cells’ parameters (i.e. temperature, voltage, current, charging status, etc.) and to dynamically adapt how the UPS operates depending on the status of the Li-Ion battery. The UPS interaction guarantees the most reliable performance and improves the system’s availability by:
- ensuring a proper control of the Li-Ion battery,
- preventing any irreversible overcharge failure,
- performing automatic corrective actions in case of any critical conditions that can affect battery performance.

High sustainability
Socomec is committed to developing solutions that reduce the environmental impact from the design stage and throughout their entire life cycle. The LI-ION BATTERY UPS energy system is the latest solution designed for helping environmental sustainability:
- no toxic materials,
- REACH/RoHS compliant materials,
- no gas emissions,
- no risk of acid leakage.
LI-ION BATTERY UPS: footprint comparison vs. Lead-Acid batteries

<table>
<thead>
<tr>
<th>LI-ION BATTERY UPS</th>
<th>FOOTPRINT</th>
<th>VRLA BATTERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power: 200 kVA</td>
<td>Footprint: 0.95 m²</td>
<td>Footprint: 1.96 m²</td>
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<tr>
<td>Back-up time: 8 min</td>
<td>Space saving: +51.6%</td>
<td></td>
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</tbody>
</table>

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<th>LI-ION BATTERY UPS</th>
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<tbody>
<tr>
<td>Power: 500 kVA</td>
<td>Footprint: 2.69 m²</td>
<td>Footprint: 4.32 m²</td>
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<tr>
<td>Back-up time: 9 min</td>
<td>Space saving: +37.8%</td>
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<th>LI-ION BATTERY UPS</th>
<th>FOOTPRINT</th>
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<tbody>
<tr>
<td>Power: 1.2 MVA</td>
<td>Footprint: 7.87 m²</td>
<td>Footprint: 13.93 m²</td>
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<tr>
<td>Back-up time: 8 min</td>
<td>Space saving: +43.6%</td>
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</tbody>
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(1) Other configurations: please contact us.