Saft’s Xcelion 6T® is a 24V battery system that offers a drop-in replacement solution for legacy battery technology in military vehicles and other industrial applications.

This ruggedized battery uses Saft’s proprietary Super-Phosphate® chemistry which is ideally suited for high performance applications requiring high levels of safety.

**Benefits**

- Only Li-ion 6T battery that meets cold temperature performance requirements
- Significant weight savings and life cycle costs compared to lead-acid chemistries
- Maintenance free
- Drop-in replacement for current vehicle batteries
- Commercial off-the-shelf solution
- Communicates over J1939 CAN Bus protocol
- Compatible with MIL-STD-1275E power bus
- UN transportation approved

**Features**

- Built-in self-balancing
- Fast charging under varying conditions*
- Self shut-down in unsafe conditions
- Internal battery management system

**Applications**

- Military ground vehicle power
- Starting, lights, and ignition (SLI)
- Silent watch
- Applications requiring balance of power and energy

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**Electrical characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal capacity</td>
<td>60 Ah</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>26.4 V</td>
</tr>
<tr>
<td>Voltage at full state of charge</td>
<td>30.0 VDC</td>
</tr>
<tr>
<td>Voltage at zero state of charge</td>
<td>20.0 VDC</td>
</tr>
<tr>
<td>Energy</td>
<td>1.6 kWh</td>
</tr>
<tr>
<td>Cold cranking amps (CCA)</td>
<td></td>
</tr>
<tr>
<td>at -18°C for 30 seconds</td>
<td>1,100 A</td>
</tr>
<tr>
<td>at -40°C for 30 seconds</td>
<td>400 A</td>
</tr>
<tr>
<td>Maximum discharge current</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>400 A</td>
</tr>
<tr>
<td>Pulse (25 ms)</td>
<td>3,000 A</td>
</tr>
<tr>
<td>Maximum charge current</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>250 A</td>
</tr>
<tr>
<td>Pulse (20 s)</td>
<td>400 A</td>
</tr>
</tbody>
</table>

**Mechanical characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>20.7 kg</td>
</tr>
<tr>
<td>Height</td>
<td>230 mm</td>
</tr>
<tr>
<td>Width</td>
<td>256 mm</td>
</tr>
<tr>
<td>Length</td>
<td>269 mm</td>
</tr>
</tbody>
</table>

**Operating Conditions**

- Operating temperature
  - Discharge: -40°C to +60°C
  - Charge*: -40°C to +60°C

**Storage and transportation temperature**

- -46°C to +71°C

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*Battery manages charge energy to ensure maximum battery life. At low temperature, the battery will automatically engage built-in heaters for optimum charging.

** Sustained high temperature storage will reduce life.
**Xcelion 6T® battery**

**Top-level system functions**
- Graphical User Interface Tool allows detailed view of battery status
- Communication of battery state of charge, temperature, and other key parameters via J1939 CAN Bus
- Redundant overcharge protection
- Overload protection
- Short circuit protection
- Over-discharge protection
- Battery reserve protection (preserves energy for engine start)
- Battery monitoring
- Built-in-Test
- Cell heating (allows full battery capability over operating temperature)
- Continuous cell balancing

**Safety heritage**
- System design includes Saft’s field proven electronic control architecture that includes overcharge protection, and over discharge, over temperature and overload protection.
- Cells equipped with hermetic seal and over pressure safety vent
- Rechargeable Li-FePO4 cells ideally suited for applications requiring high discharge, continuous or pulse power, fast re-charge, long cycle and calendar life, and high levels of safety.

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Saft America, Inc.
Space & Defense Division
107 Beaver Ct.
Cockeysville, MD 21030
Tel.: +1 410-771-3200
Fax: +1 410-771-1144
Email: SaftDefenceUS@saftbatteries.com
www.saftbatteries.com

Saft SAS
Space & Defense Division
Rue Georges Leclanché
86000, Poitiers
Tel.: +33 (0) 549 551 866
Fax: +33 (0) 549 554 780
www.saftbatteries.com