Power Start
12v Lithium-Ion Starter Battery

**Lightweight - High Power - Lithium-Ion starter battery**
- High lifespan: thousands of cycles (see chart)
- Deep discharge allowed up to 100%
- Ultra safe Lithium Iron Phosphate chemistry (no thermal run-away, no fire or explosion risks)
- Up to 80% lighter and 70% smaller than conventional Lead-acid battery.
- Embedded BMS (Battery Management System): improve lifespan and secure the battery
- No Lead, no heavy metal, no toxic element
- Calendar life > 10 years
- Excellent temperature robustness (-20 °C up to +60 °C)
- Constant power during discharge (very low internal resistance)
- Very low Peukert’s losses (energy efficiency >96 %)
- Very low self discharge (<5 % per month)
- No memory effect
- Certification: CE, RoHS

**Technical Specifications**

<table>
<thead>
<tr>
<th>Main Spec</th>
<th>PS 2200</th>
<th>PS 5001</th>
<th>PS 5002</th>
<th>PS 6100</th>
<th>PS 9000</th>
<th>PS 16000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>12.8V</td>
<td>12.8V</td>
<td>12.8V</td>
<td>12.8V</td>
<td>12.8V</td>
<td>12.8V</td>
</tr>
<tr>
<td>CCA (Cold Cranking Amp)</td>
<td>130A</td>
<td>280A</td>
<td>300A</td>
<td>350A</td>
<td>450A</td>
<td>600A</td>
</tr>
<tr>
<td>Maximum Engine Size</td>
<td>800 cm³</td>
<td>1300 cm³</td>
<td>1500 cm³</td>
<td>2000 cm³</td>
<td>3000 cm³</td>
<td>6000 cm³</td>
</tr>
<tr>
<td>Length (mm)</td>
<td>113mm</td>
<td>150mm</td>
<td>135mm</td>
<td>175mm</td>
<td>166mm</td>
<td>181mm</td>
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<tr>
<td>Width (mm)</td>
<td>70mm</td>
<td>87mm</td>
<td>75mm</td>
<td>87mm</td>
<td>125mm</td>
<td>77mm</td>
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<tr>
<td>Height (mm)</td>
<td>85mm</td>
<td>93mm</td>
<td>139mm</td>
<td>130mm</td>
<td>173mm</td>
<td>167mm</td>
</tr>
<tr>
<td>Weight</td>
<td>490g</td>
<td>950g</td>
<td>990g</td>
<td>1100g</td>
<td>1750g</td>
<td>2840g</td>
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<tr>
<td>Self discharge</td>
<td>&lt; 5% per month</td>
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<tr>
<td>Charge mode</td>
<td>Constant Charge / Constant Voltage</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Panel State of Charge indicator</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Charge temperature range</td>
<td>0°C à 45°C @60±25% relative humidity</td>
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<tr>
<td>Discharge temperature range</td>
<td>-20°C à 60°C @60±25% relative humidity</td>
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<tr>
<td>Storage temperature</td>
<td>0°C à 40°C @60±25% relative humidity</td>
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<td>IP protection level</td>
<td>IP 56</td>
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</table>

**APPLICATIONS**
- SLI / Starter batteries
- Very High Power applications
- Motorbike, scooters
- Quads
- Jet-ski
- Snowmobile
- Microlight, LSA
- Airplane starter batteries
Charts and curves

PowerStart Typical Start Cycle

Different Temperature Self Discharge Curve

Different DoD Discharge Cycle Life @1C

Different Temperature Discharge Curve @0.5C

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PowerStart

Low voltage drop - Steady Power

Conventional start battery
Voltage drop - Power loss

START ENGINE CRANKING AMP

Different Temperature Self Discharge Curve

Remaining Capacity (%)

Storage Time (Months)

10°C 25°C 30°C 40°C 50°C

60 70 80 90 100

Different DoD Discharge Cycle Life @1C

Remaining Capacity (%)

Number of Cycles

DoD
Lifepo4:
55%
65%
80%
100%
DoD AGM:
50%

Different Temperature Discharge Curve @0.5C

Capacity (%rated)

Voltage (V)

90°C 80°C 70°C 60°C 50°C

10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5

PowerTech Systems SAS
Technoparc - Espace Cristal
22 Rue Gustave Eiffel
78300 POISSY - France

SAS au capital de 50 000 Euros
SIREN : 793926577 – TVA : FR33793926577
www.powertechsystems.eu
+33 954 051 619
info@powertechsystems.eu