A123 Systems’ high-performance Nanophosphate® lithium-ion technology delivers high power and energy density combined with excellent safety performance and extensive life cycling.

A123 Systems' Nanophosphate® lithium-ion products have low capacity loss and impedance growth over time, allowing systems to meet end-of-life power and energy requirements with minimal pack oversizing.

Mid-Continent Instruments and Avionics is proud to be the exclusive worldwide distributor of A123’s Nanophosphate lithium-ion cells for the aviation industry. The technology provides significant weight savings and cost of ownership advantages over legacy lead-acid designs.

Technical specifications

- **DIMENSIONS**: 26 x 65mm
- **WEIGHT**: 76g
- **POWER**: >2,600 W/kg and 5,800 W/L
- **CAPACITY**: 2.5Ah (nominal) / 2.3Ah (minimum)
- **VOLTAGE**: 3.3V (nominal)
- **INTERNAL IMPEDANCE**: 6 (1kHz AC typical, mΩ)
- **RECOMMENDED STANDARD CHARGE METHOD**: 2.5V to 3.6V CCCV, 60 min
- **RECOMMENDED FAST CHARGE CURRENT TO 80% SOC**: 4C to 3.6V CC, 12 min
- **MAX. CONTINUOUS DISCHARGE**: 50A
- **MAX. PULSE DISCHARGE**: 120A (10 seconds)
- **TEMPERATURE**: -22° F to 158° F (-30° C to 65° C) Operating
- **CERTIFICATION**: FAA TSO certified units available

**The Nanophosphate® Advantage**

- **Power**: Superior power by weight or volume in a cost-effective solution
- **Safety**: Nanophosphate® is stable chemically, providing the foundation for safe systems
- **Life**: Excellent calendar and cycle life with consistent performance over extended use
- **Energy**: Higher useable energy means greater battery utilization and lower cost
Safety begins with chemistry. A123 Systems' Nanophosphate® is stable chemically, which provides the foundation for safe systems while meeting the most demanding customer requirements. Multiple layers of protection are employed at the chemistry, cell and system level to achieve an energy storage solution with superior safety and abuse tolerance.

Performance may vary depending on use conditions and application.
A123 Systems and Mid-Continent Instruments and Avionics make no warranty explicit or implied with this data sheet. Contents subject to change without notice.