



Orbiter Battery



60 Ah, 28 V Lithium-Ion Battery

Missions

- OSIRIS-REx - launched 2016
- MAVEN Mission - launched 2013
- Juno Mission - launched 2011

Features and Benefits

- Proprietary prismatic cell technology
- 8S1P, 28 V battery
- On-board cell equalization
- Electronics enclosure
- 8-60 Ah lithium-ion cells

Applications

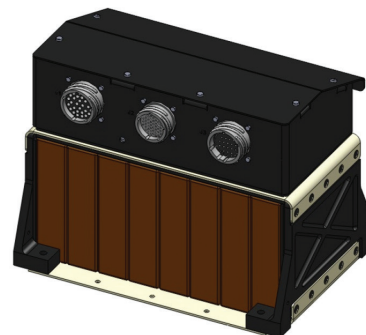
- Low-earth orbit and geosynchronous-earth satellite missions
- Planetary exploration
- Reusable launch vehicles
- Deep space exploration
- Lunar missions

Proven battery technology utilizing high energy, long-cycle life, low weight and small volume lithium-ion cells

Specifications*

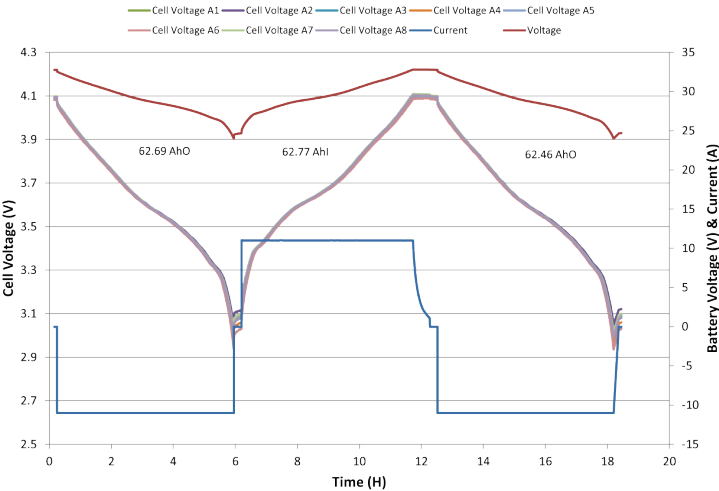
Part Number	LP 33165
Weight	18 kg (40 lbs)
Dimensions	See details on back
Voltage Range	24.0 to 32.8 V
Nominal Voltage	28 V
Nominal Capacity	60 Ah
Energy Density	123 Wh/L
Specific Energy	109 Wh/kg
Discharge Rates	Continuous: 1C Pulse: 2C for 1 seconds
Nominal Cell Impedance	2 mΩ at 50% state of charge
Cycle Life (40% depth of discharge 90-minute low-earth orbit cycles)	>40,000
Standard Charging Method	Constant current 12 A (C/5) to 4.1 V Constant voltage 32.8 V (4.1 V/cell), taper to 1.2 A (C/50)
Operating Temperature	-20 to 40°C (-4 to 104°F)
Recommended Storage Temperature	0°C ±10°C (32°F ±18°F)

*Specifications represent battery used on MAVEN mission, other missions used a similar battery design with custom specifications



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SN005 Capacity Para. 3.2



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