

15.5 Ah Lithium-Ion Space Battery



High-Quality Lithium-Ion Rechargeable Battery

Features and Benefits

- Qualified for space flight
- High energy density
- Highly reliable
- Low cyclic capacity fade
- Long calendar life
- Autonomous cell bypass capability
- Primary and redundant heaters
- Back-up temperature and voltage telemetry
- Built-in cell safety protection
- Current sense capability
- High reliability > 0.99

Applications

- Military communications and surveillance
- Commercial communication and broadcasting
- Environmental monitoring
- Global navigation and tracking
- Scientific and exploratory satellite missions
- Launch vehicle

**High quality, low cost
space qualified lithium
ion battery**

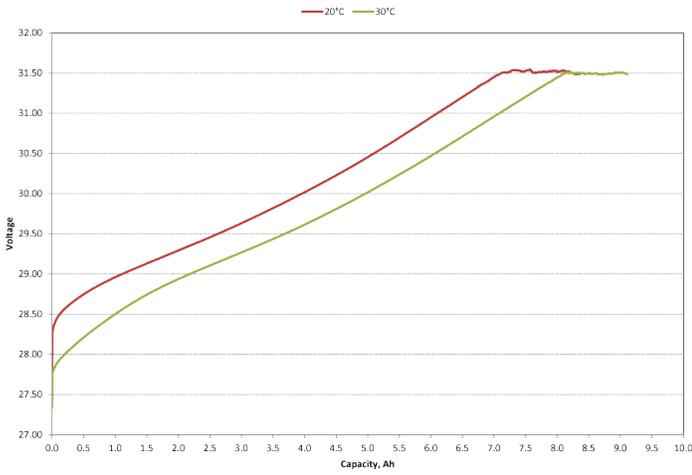
Specifications

Part Number	SAR 10215
Nominal Cell Weight	3.95 kg (8.7 lb)
Maximum Dimensions	See diagram on back
Nominal Voltage	28.8 V
Operating Voltage	32.0 V to 33.6 V
Beginning of Life Capacity/Energy	15.5 Ah/446.4 Wh
Energy Density	343 Wh/L
Specific Energy	113.1 Wh/kg
Operating Temperature	0 to 60°C (32 to 140°F)
Operating Temperature Discharge	-20 to 60°C (-4 to 140°F)
Survival Temperature (non-op)	-20 to 60°C (-4 to 122°F)
Charge Current (Max)	7.2 A
Maximum Continuous Discharge	15 A
Maximum Discharge Pulse	30 A
Random Vibe Levels	24.9 G
Sine Vibe Levels	19.8 G
Shock Level	2800 G

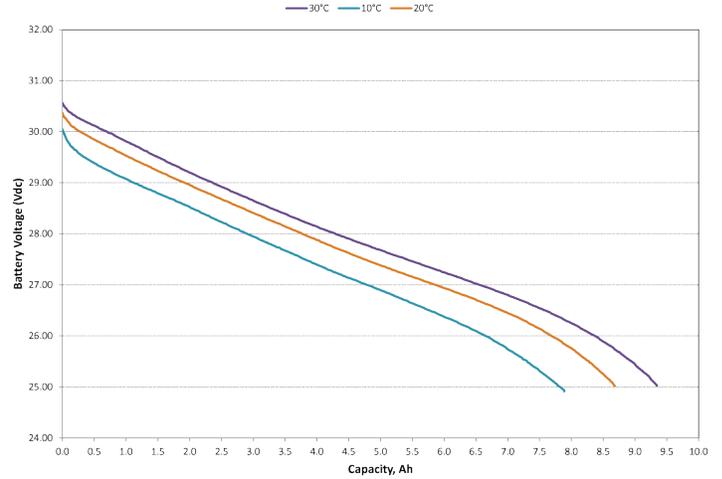
Concept Design - Product Under Development

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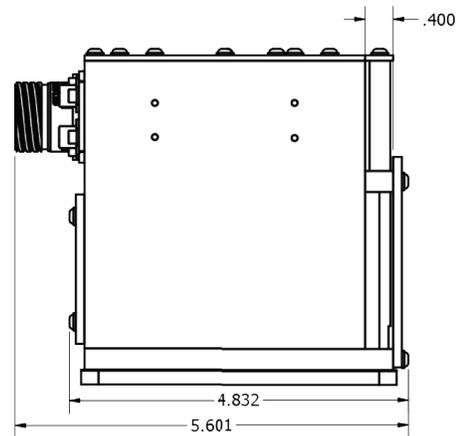
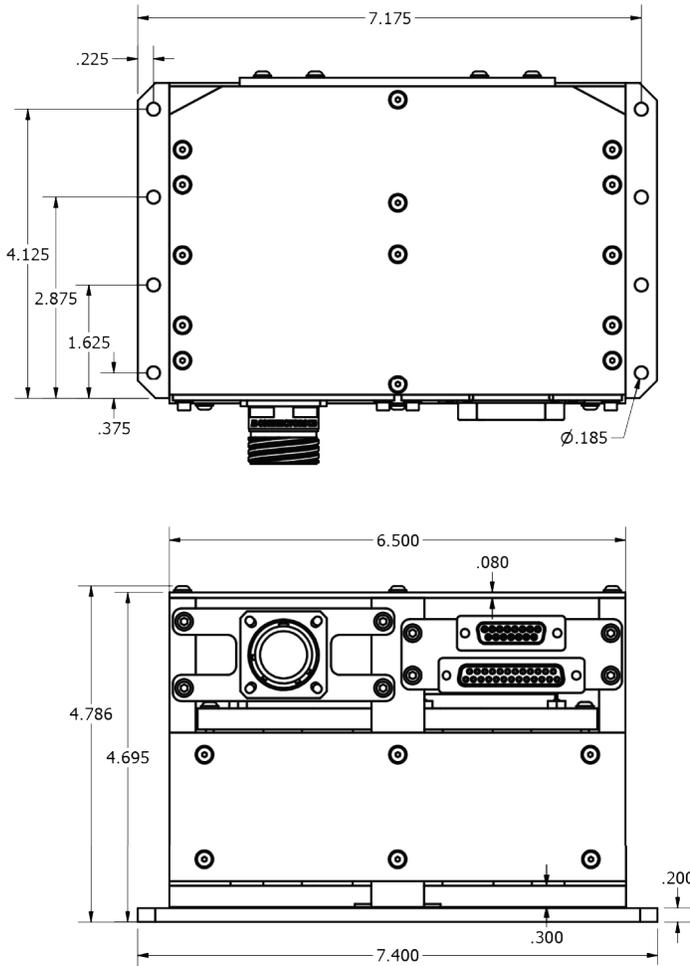
Charge Voltage Profiles



Standard Capacity Tests Comparison



The 14.5 Ah rated capacity is based upon a cell module End-of-Charge Voltage (EOCV) of 4.2V and an End-of-Discharge Voltage (EODV) of 2.50V. The data in the charts is based on an EOCV of 3.94V and an EODV of 3.125V.



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