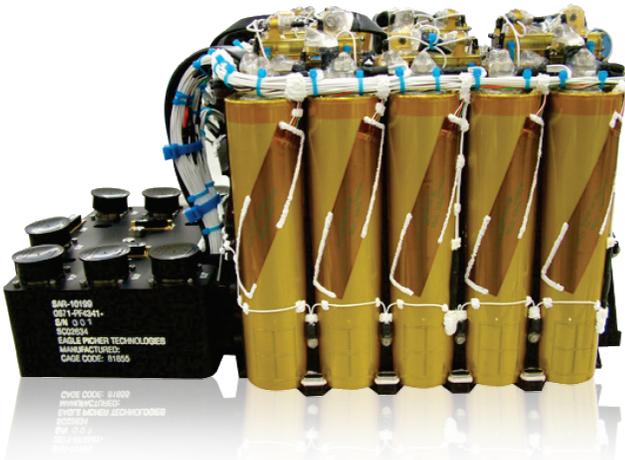


SAR-10199 Aerospace Battery



Incorporating lithium-ion cells to deliver a proven battery design

Lithium-Ion – Lithium Cobalt Oxide Rechargeable

Features and Benefits

- Autonomous cell bypass capability
- Primary and redundant heaters
- Back-up temperature and voltage telemetry
- Built-in cell safety protection
- Current sense capability
- Operational for 15-year mission life (GEO)
- Space flight heritage
- High reliability > 0.99
- Built-in lifting points with detachable lifting fixture
- Designed for radiation total-dose exposure of 3.11E6 rads
- Connector savers for spacecraft integration and test bracket
- Custom connectors are keyed and clocked per customer specification; MIL-DTL-38999 and/or NASA-S-311-P-768 connectors available upon request
- Subjected to vibratory and thermal-vacuum testing

Applications

- Military communications and surveillance
- Commercial communication and broadcasting
- NASA research
- Environmental monitoring
- Global navigation and tracking

Specifications

Part Number	SAR-10199
Weight Not to Exceed	35.0 kg (77.2 lbs)
Maximum Dimensions	Width: 27.3 cm (10.8 in.) Length: 50.8 cm (20.0 in.) Height: 27.3 cm (10.8 in.)
Nominal Voltage	33.3 V
Operating Voltage	27.0 to 36.9 V
Beginning of Life Capacity/Energy	100 Ah/3663 Wh at 20°C (68°F)
Specific Energy	104.6 Wh/kg
Maximum Current Charge	55 A
Maximum Continuous Discharge	100 A
Maximum Discharge Pulse	330 A for 5 sec
Operating Temperature	-5 to 35°C (23 to 95°F)
Survival Temperature (non-operating)	-15°C to 40°C (5 to 104°F)
Random Vibe Levels	14 g
Sine Vibe Levels	15 g
Shock Levels	1135 g

SAR-10199 Aerospace Battery

SAR-10199 Charge/Discharge Curves

