

4S1P VES16 battery

Saft's standard design for space applications

Battery specifically designed for Low Earth Orbit applications

The battery is based on VES16 space cells designed for LEO applications. This battery is sized for low power needs, such as microsats and nanosats, and can be used as a building block and assembled in serial and parallel for higher energy requirements.

Benefits

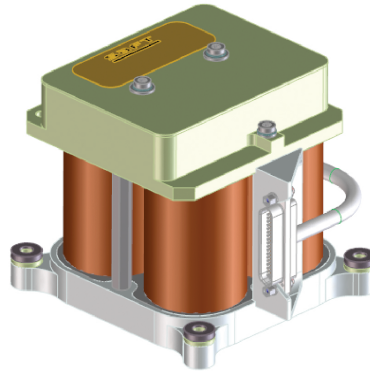
- Use of flight proven VES16 cells providing long life in LEO application up to 12 years
- Compact adaptable configuration
- Low cost design
- Reliability and safety

Equipment

- Circuit breaker at cell level
- Heater
- Thermal sensor
- MDMA 37P connector for power and telemetry
- Aluminium plate

Key features

- High mission use energy density
- Stainless steel casing
- Hermetically sealed
- Maintenance free
- No memory effect
- Manufactured in EU
- Certification ECSS



Electrical characteristics

Nameplate capacity	4.5 Ah
Battery voltage range	13.2 - 16.4 volts
Nominal energy	64 Wh

Physical characteristics

Length	90,5 mm
Width	84,1 mm
Height	77 mm
Weight	0,70 kg

Operating conditions

Recommended cycling temperatures	[10°C ; 30°C]
Maximum charge current	C/2 at 20°C
Maximum continuous discharge current	Continuous C Pulse 2C
Life duration and cycle life	More than 5 years >25 000 cycles
Charging method	Constant current / current voltage
Charging voltage recommended end of charge voltage for mission	16.1 volts
Storage & transportation temperatures	Recommended -20°C to +10°C Allowable -20°C to +40°C

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