

28V Space Grade Battery System

Rechargeable Li-ion battery system

High power lithium-ion battery

Saft's 28V space grade battery system is ideally suited for space applications, launch vehicle applications, and other applications requiring high power density; moderate energy density; reliable ("always available") discharge; good recharge; and long cycle and calendar life.

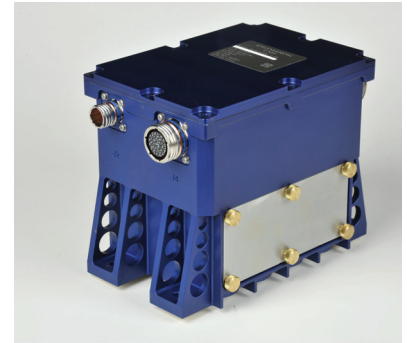
Saft large format Li-ion cells are only available in complete energy storage systems. This ensures necessary safety, and usage considerations appropriate and tailored to customers application requirements.

Features & Benefits

- Robust mechanical assembly designed and tested to withstand very high levels of shock (1300G) & random vibration (40 Grms) associated with launcher applications
- Uninterruptible power discharge path suitable for flight termination applications
- Separate charge path with overcharge detection/prevention capability
- CANProbe® voltage and temperature monitor board with balancing circuitry
 - Safety Evidence Assurance Level B qualified software
 - Controller Area Network communication capability to host system
- Built-in heater to enable battery temperature conditioning for operation
- Mature in-house test equipment and capability to support thorough acceptance and/or qualification testing

Typical applications

- Space
- Launchers



Electrical characteristics at +25°C

Maximum charge voltage	32.8 V
Nominal voltage	28 V
Nominal end of discharge voltage	24 V
Capacity*	3.0 Ah
Max continuous discharge rate**	30 A
Max charge rate***	15 A
Pulse discharge capability****	250 A

Physical characteristics

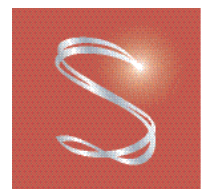
Weight	11.5 lbs
Width	5.5 in
Length	8.68 in
Height	6 in

*Nominal capacity at C rate at 4.1V/2.5V & 25°C.

**For continuous or high duty cycle charge/discharge profiles contact Saft for thermal constraints.

***Temperatures above 10°C. For Charge at lower temperatures contact Saft.

**** 200ms pulse

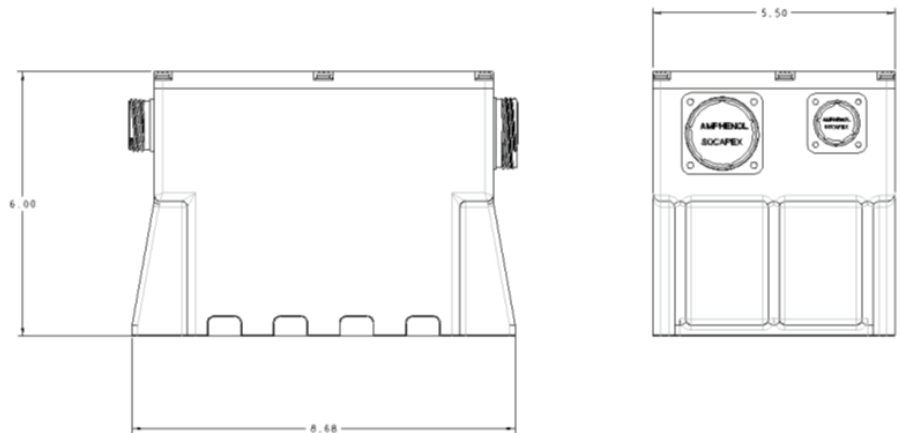
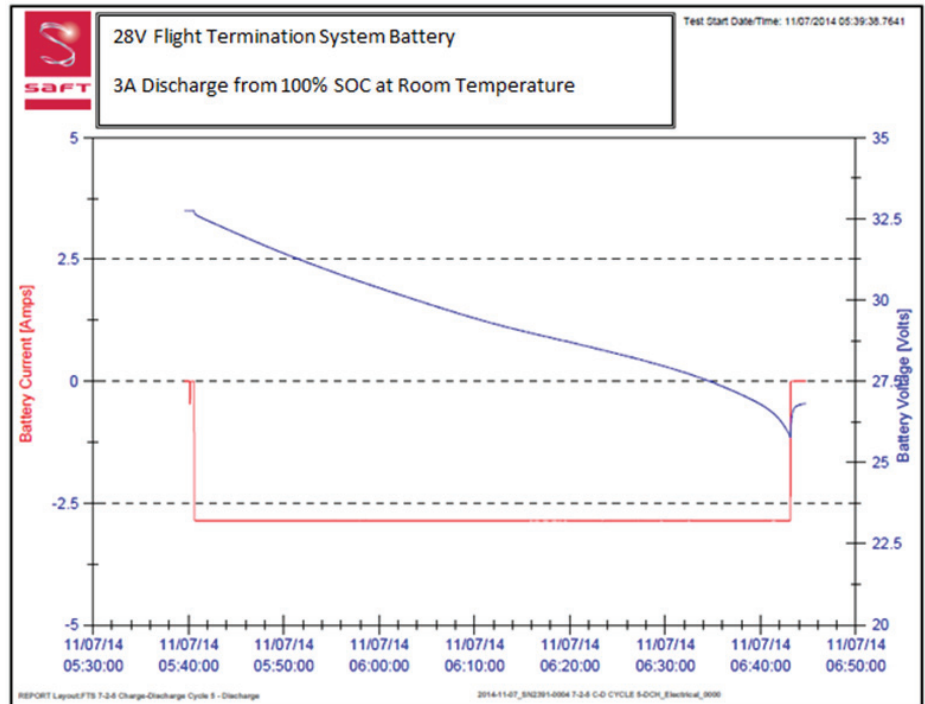


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Battery-level features

- Saft provides complete battery system design
- Incorporating several levels of redundant safety features to prevent abuse conditions such as over-charge and short circuit protection (over Ground Support Equipment connector)
- Incorporating electronics and separately available CANProbe® Management System (CMS) for performance efficiency:
 - Charge/floating management
 - Cell balancing
 - Temperature monitoring
- Powered by external 28VDC



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