EnerSys®
Power/Full Solutions

ABSL™

# Li-ion Rechargeable Battery
# ABSL™ 8s3p 28 V 8.4 Ah

**Leading the industry without failure for over 25 years of continuous in-orbit heritage using ABSL™ Li-ion battery technology.**

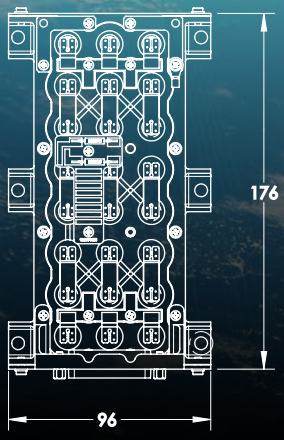
The ABSL™ 8s3p 8.4 Ah battery is a compact and dependable power solution, initially developed for the Korean Space Launch Vehicle (KSLV). This small, signature battery design has been used by numerous customers from launch to LEO. Several versions of the ABSL 8s3p battery have been flown over time, with the latest model featuring an 8.4 Ah capacity.

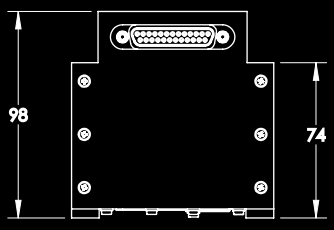
The robust ABSL 8s3p battery is a low-risk, flight tested and energy-dense power solution perfect for smaller applications.

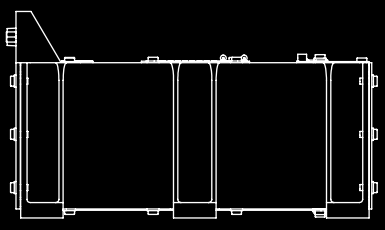
ABSL standard spacecraft batteries uniquely eliminate the need for complex cell balancing electronics by leveraging proprietary and flight proven manufacturing processes pioneered by EnerSys.

## Facts at a Glance

| | |
|---|---|
| ABSL™ Cell | 18650 I28 |
| Configuration | 8s3p |
| Nameplate Capacity | 8.4 Ah |
| Nameplate Energy | 248.6 Wh |
| Maximum Discharge Current (continuous) | 8.4 A |
| Nominal Mass | 1.66 kg |
| Footprint | 176 x 96 mm |
| Height | 98 mm |
| Voltage Range | 24 - 33.6 V |



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## Qualification

| Temperature | |
|---|---|
| **Non-Operating (°C)** | **Operating (°C)** |
| -10 to 55 | Discharge: 0 to 45 |
| | Charge: 0 to 45 |

| Cell Level Radiation Exposure | |
|---|---|
| **Dosage** | **Effects** |
| < 1Mrad | Negligible |
| Up to 18Mrad | <1% capacity loss |

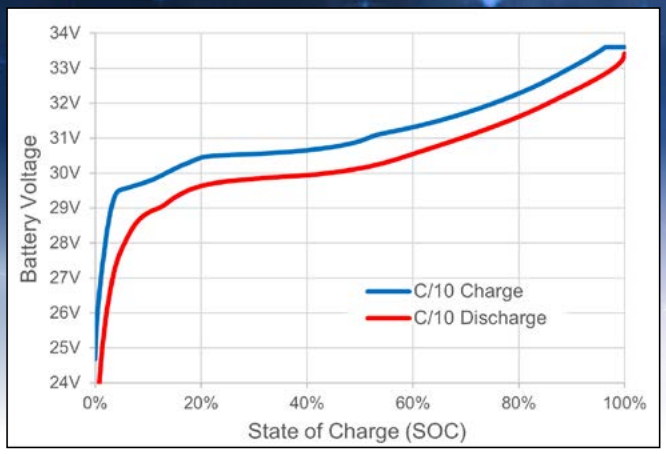
| Shock | |
|---|---|
| **Frequency (Hz)** | **PF SRS Level Test Q = 10** |
| 100 | 100 g |
| 1,000 | 3,000 g |
| 10,000 | 3,000 g |

Note: via similarity

| Random Vibration | |
|---|---|
| **Frequency (Hz)** | **ASD ($g^2$/Hz)*** |
| 20 | 0.024 |
| 80 | 0.300 |
| 250 | 0.300 |
| 300 | 0.220 |
| 700 | 0.220 |
| 2,000 | 0.032 |
| Overall $G_{RMS}$ | 16.4 |
| Duration | 1 min/axis |

*Notching utilized within profile

## 20°C Charge and Discharge Voltage Profiles

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