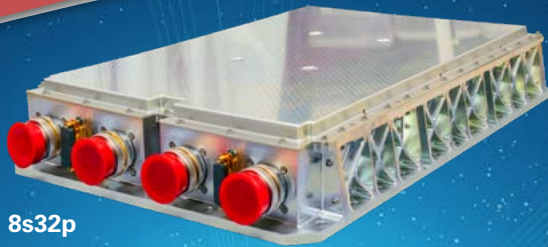
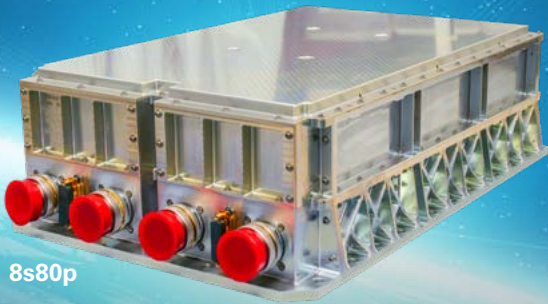


**Li-ion Rechargeable Battery
ABSL Modular High-Power**

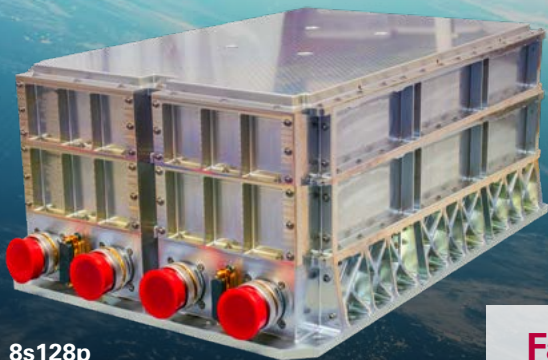
8s32p 28 V 112 Ah • 8s80p 28 V 280 Ah • 8s128p 28 V 448 Ah



8s32p



8s80p



8s128p

The Modular High-Power (MHP) battery was designed to provide a flexible solution for the rapidly growing power demands of new space applications. Utilizing a set footprint, the MHP battery can easily be integrated across multiple platforms and support various mission types. The battery is designed to accommodate a wide range of power needs by leveraging the robust E35 3.5 Ah cell.

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

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

Facts at a Glance

ABSL [™] Cell	18650 E35		
Configurations	8s32p	8s80p	8s128p
Nameplate Capacity	112 Ah	280 Ah	448 Ah
Nameplate Energy	3257 Wh	8142 Wh	13,027 Wh
Nominal Discharge Rate	112 A	280 A	448 A
Nominal Charge Rate	109 A	272 A	435 A
Nominal Mass	33 kg	70 kg	100 kg
Height	98 mm	176 mm	256 mm
Footprint	603 x 402 mm		
Voltage Range	24 - 33.6V		

Li-ion Rechargeable Battery ABSL Modular High-Power

8s32p 28 V 112 Ah • 8s80p 28 V 280 Ah • 8s128p 28 V 448 Ah

Qualification

Temperature	
Non-Operating (°C)	Operating (°C)
-20°C to 60°C	Discharge: 0°C to 40°C
	Charge: 0°C to 40°C

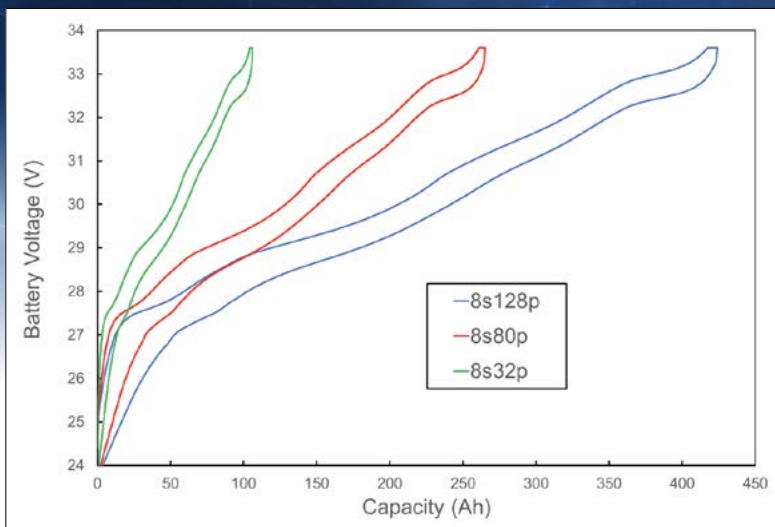
Cell Level Radiation Exposure	
Dosage	Effects
< 1Mrad	Negligible
Up to 10Mrad	<1% capacity

Shock	
Frequency (Hz)	PF SRS Level Test Q = 10
100	31 g
1,400	848 g
10,000	848 g

Random Vibration	
Frequency (Hz)	ASD (g ² /Hz)
20	0.010
50	0.058
800	0.058
2,000	0.010
Overall G _{RMS}	8.55
Duration	2 min/axis

*Based on largest battery qualification - 8s128p

C/10 Charge/Discharge Curves at 20°C, 33.6V-24.0V



These batteries and controlled technical data are classified under the Commerce Control List and are subject to licensing requirements for any export. Additional export restrictions and regulations may apply depending on their end use. It is the responsibility of the purchasing or receiving party to comply with all requirements of export laws, including ensuring that all required export authorizations are in place prior to exportation or re-exportation.

