

Product Data Sheet

Li-ion Space Battery

ABSL[™] CM2300 – 8s40p P20 28V 80Ah

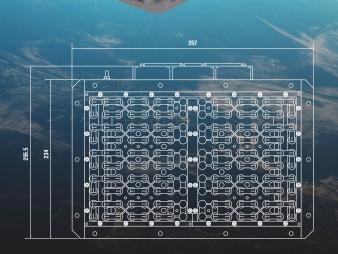
Fully qualified for space applications, this battery has been utilised for a variety of missions such as ESA LEO, communications and national Synthetic Aperture Radar (SAR) programmes.

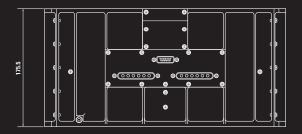
The design incorporates an interchangeable connector bracket which allows easy customisation for a variety of platforms and does not require cell balancing electronics, making it easy to store, use and integrate into the spacecraft.

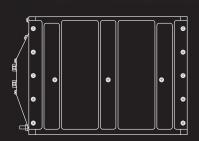
Facts at a Glance

| ABSL [™] Cell | P20 |
|------------------------|--------------|
| Topology | 8s40p |
| Voltage Range (V) | 33.6 - 24.0 |
| Nameplate Capacity | 80 Ah |
| Energy | 2300 Wh |
| Footprint | 260 x 359 mm |
| Height | 177 mm |
| Mass (kg) | 20 |
| | |

Celebrating customer success with over 5.5 billion cell hours of in-orbit heritage using ABSL™ Li-ion cell technology







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Qualification

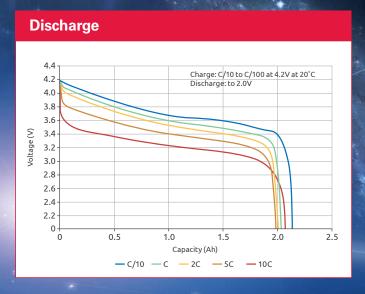
| Temperature | |
|--------------------|----------------|
| Non-Operating (°C) | Operating (°C) |
| -20 to 50 | 0 to 40 |

| Shock | | |
|------------------------|-----------|--|
| Frequency (Hz) | Input (g) | |
| 100 | 40 | |
| 2000 | 2000 | |
| 10,000 | 2000 | |
| No of shock (per axis) | 3 | |

| Intern | al Resistance | |
|----------------------------|---|----|
| 0.30 | | |
| 0.25 | | |
| ලු 0.20 | | |
| (C) 0.10 (D) 0.10 (D) 0.10 | | |
| o.10- √ | | |
| 0.05 | | |
| 0.00 | 10 20 30 40 50 60 70 80 90 10 SoC[%] | 00 |
| Discharge T | mperatures: — 60°C — 40°C — 20°C — 10°C — 0°C — -15°C | °C |

| Cell Level Radiation Exposure | | |
|-------------------------------|--------------------------|--|
| Dosage Mrad | Effects | |
| 10 | <1% decrease in capacity | |

| Random Vibration | | |
|--------------------------|----------------|--|
| Frequency (Hz) | Input (g^2/Hz) | |
| 20 | 0.1256 | |
| 80-200 | 0.5 | |
| 200-400 | 0.3 | |
| 2000 | 0.0121 | |
| Overall G _{RMS} | 15.4 | |
| Duration | 4 | |







Visit us at: www.enersys.com/space or email: space@enersys.com



EMEA/APAC-EN-DS-ABSL-CM2300-8s40p-0722-Preliminary