65kW Electrical Accumulator Unit 340Vdc to 270Vdc

The EAU is a bi-directional DC-DC converter, working in conjunction with a Li-Ion battery, which stabilizes a DC Bus during transients caused by electro-mechanical and regenerative loads. The EAU supports peak power load demands to increase Generator mission capability. Regenerative voltage spikes and surges are captured and returned to a battery or ultra-cap power source, eliminating the need for dissipative solutions.

Features:
- Best-in-Class SiC MOSFETs
- High Efficiency
- High Peak Power Capable
- Reduced weight versus Silicon
- High Reliability
- MIL-STD 704, 270V DC System
- EMI – MIL-STD-461F
- Overcurrent & Overvoltage Protection
- Battery Charging
- 28V logic level status reporting and input commands
- Serial Data input and reporting
- Derating – NAVMAT-P-4855-1
- MTBF > 20,000 Hours, AUF at 60°C
- AEC-Q101 SiC device qualification

Physical: (See ICD 5001001)
- Weight: 13.6kg (30 lbs.)
- Dimensions: 489mm x 346mm x 155mm (19.24” x 13.64” x 6.12”)
- Connector: Power: Smiths HBB 300 Amp Series Signals: D38999 24 Shell
- Mounting: 4.8mm bolt (#10) (2x)

Environmental:
- Operating Temperature: -55°C to +85°C
- Vibration: MIL-STD-810E, Transportation
- Humidity: MIL-STD-810E, Method 507, Procedure III
- Temperature Shock: MIL-STD-810E, Method 503.3

Electrical I/O:
J1: 28V logic level I/O and Serial Bus
J2: 28V input power
J3: APU Start 270V
J4: Battery Bus 270V
J5: Battery
J6: Battery Return

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Input Voltage</th>
<th>Output Voltage</th>
<th>Output Current (A)</th>
<th>Regulation (line, load, temp)</th>
<th>Ripple &amp; Noise (Vpk-pk)</th>
<th>Output Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5001000G1</td>
<td>270 - 340</td>
<td>270</td>
<td>240</td>
<td>3.0%</td>
<td>2%</td>
<td>65,000</td>
</tr>
</tbody>
</table>