

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

Part Number	Input Voltage	Output Voltage	Output Current (A)	Regulation (line, load, temp)	Ripple & Noise (Vpk-pk)	Output Power (W)
5001000G1	270 - 340	270	240	3.0%	2%	65,000



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