



## 60/48 Ah Lithium Battery Technology



P/N 356BS101-1

### **CHEMISTRY**

Lithium-Iron Phosphate

### **CAPACITY**

60 Ah Beginning-of-Life (BOL)

48 Ah End-of-Life (EOL)

### **CHARGE VOLTAGE**

28 VDC nominal

### **OUTPUT VOLTAGE**

26.4 VDC nominal

### **OUTPUT CURRENT**

1500 A (peak)

500 A (continuous)

### **WEIGHT**

67.1 lb.

### **DIMENSIONS**

10.44" L x 11.04" W x 13.16" H

### **CONNECTOR**

MS-3509 FORM FACTOR

MIL-DTL-38999

## **ACME BATTERY FEATURES & ADVANTAGES**

### **Redundant Protection**

#### Analog BMS

- Protects battery independent of software
- Provides Over/Under Voltage Protection
- Provides Over Temp Protection
- Protection Thresholds via Hardware Component Selection

#### Digital BMS

- Monitors and Provides accurate Voltage and Temperature measurements to the Micro Processor to back-up the Analog BMS, while providing Accurate SOC/SOH parameters

#### Back-to-Back MOSFETs

- Completely disconnects battery from the system in case of Abuse Conditions, such as Output-Shorts, Over-Current, and Over-Discharge events

### **Thermal Management**

#### Phase Change Material (PCM)

- Protects against Thermal Runaway in the remote case of a Single-Cell Failure
- Keeps the cells at a Uniform Temperature improving Performance and Battery Life Expectancy

#### Temperature Monitoring

- Acme's battery has Multiple Sensors located strategically throughout each Battery Module
- Additional Temperature Sensors located within the Power Electronics section

### **Communication and Data Management**

#### ARINC 429 (Standard Configuration)

- Customizable for Alternative Data Bus Configurations

#### RS232 Service Port

- Accessibility through a PC with Graphic User Interface (GUI)
- Can be used for Field Firmware Upgrades
- Used to retrieve BIT (Built-In Test) Logs and Fault events

#### Non-Volatile Memory (NVM)

- Captures Lifetime Battery Usage, Faults, Serial Numbers, and Maintenance History

### **Floating Bus Operation**

- Reduced Size and Weight
- Fast Charge Times
- Direct replacement for Vented Ni-Cd and Lead Acid batteries
- Charge Current is Monitored and Controlled
- Compatible with MIL-STD-704 28 VDC Bus