

### SINGLE BOX BATTERY MANAGEMENT SYSTEM

Merlin Power System's Vehicle Battery Management System (VBMS) Lite delivers adjustable charging and power sharing capability for two (2) battery banks on a vehicle, while automatically protecting both from over-discharge and damage.

### AUTOMATIC DEEP DISCHARGE PROTECTION

VBMS Lite provides automatic deep discharge protection for both battery banks, guaranteeing engine starting and auxiliary battery reliability. This prevents flat batteries, which helps limit vehicle downtime and saves money on unnecessary battery replacement.

### PRIORITY ADJUSTABLE

Unlike other devices capable of split charging, VBMS Lite's settings are fully adjustable. It allows the user to determine how much the engine batteries are prioritized for recharge before supplying power for auxiliary use.

### POWER SHARING FUNCTIONALITY

VBMS Lite can be configured to allow engine batteries to supplement auxiliary batteries during discharge, which can increase capacity and run time for silent watch missions.

### EMERGENCY PARALLEL CAPABILITY

VBMS Lite can connect both battery banks through a remote switch to allow one to supplement the other for emergency engine starting or other instances where the need for maximum power is immediate.

### REMOTE BATTERY ISOLATION

VBMS Lite replaces existing battery on / off switches, allowing batteries to be switched from a remote dashboard location.

### PC CONFIGURABLE

VBMS Lite can be configured using a PC for different vehicle and battery types.

### SIMPLE SYSTEM DIAGNOSTICS

VBMS Lite comes with PC-based diagnostics and data logging for easy vehicle troubleshooting.

### LOW POWER CONSUMPTION

VBMS Lite's power consumption is extremely low compared to that of other competitive products.



### SPECIFICATIONS

**Part Number:**

MBM-7001

**Size:**

9.69" W x 7.33" D x 3.50" H

**Weight:**

7.28 lbs.

**Nominal Power Consumption:**

33.3 mA

**Normal Voltage Operating Range:**

8 to 40 VDC

**Operating Temperature:**

-25° C to 105° C

**Storage Temperature:**

-55° C to 150° C

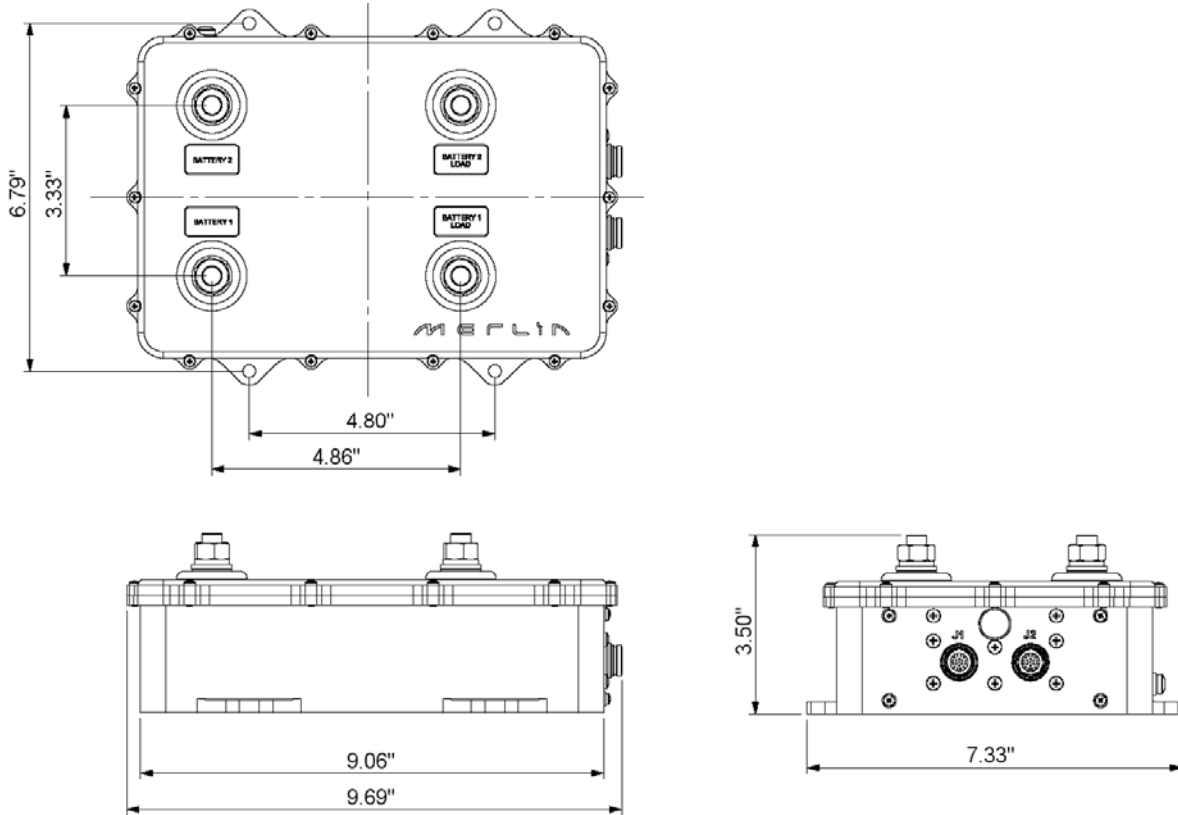
**EMI Specifications:**

Designed to MIL-STD-461F

**Environmental Specifications:**

Designed to MIL-STD-810G

OUTLINE/INSTALLATION DRAWING



SYSTEM OVERVIEW

