

## ON THE BATTLEFIELD, POWER IS KING

Today's modern battlefield is technology-driven. Technology needs electrical power, which translates into massive amounts of batteries needed to achieve operational success. Optimizing battery power is crucial in all tactical scenarios.

Merlin Power Systems' Battery Monitoring System (BMS) provides critical, real-time battery health and status ensuring the warfighter has the necessary power to overcome the threat at hand.

## TESTED AND PROVEN

Tested and approved by the world's largest industrial battery manufacturers, the BMS is currently being deployed on widely used battle platforms, such as the M1 Abrams Tank and M3 Bradley Fighting Vehicle.

## ESSENTIAL, ACCURATE BATTERY DATA

The BMS not only provides State-of-Charge (SoC), Net Charge/Discharge and Battery Temperature data, but also allows the vehicle commander to see battery capacity remaining (State-of-Health (SoH)) and time remaining to reach a pre-programmed discharge level.

Having detailed battery data at your fingertips prevents power loss at operationally vital moments, lets maintenance crews know exactly when failing batteries need replacement and prevents replacement of good batteries, which saves money, time and effort.

## EXTREMELY LOW POWER CONSUMPTION

The Merlin Power Systems BMS consumes a miniscule amount of power, so you aren't wasting the very electrical power you are trying to optimize.

## LIGHTWEIGHT, MINIMAL FOOTPRINT, RUGGED

The BMS is small enough to be mounted in tight spaces, such as vehicle battery compartments. It is also lightweight, but rugged enough to withstand the harshest environments (tested to and compliant with MIL-STD-1275, MIL-STD-461F and MIL-STD-810G).



## SPECIFICATIONS

### **Part Number:**

DC2-7201AB

### **Size:**

Control Unit (CU): 8.42" W x 5.55" D x 2.85" H

Shunt Sensor Module (SSM): 5.48" W x 4.97" D x 3.22" H

### **Weight:**

<5 lbs. per battery pair (sans cables)

### **Nominal Power Consumption:**

<15 mA (Standby)

<35 mA (Operating)

### **Performance Characteristics:\***

SoC and SoH: Accurate to within 2%

Voltage: 0.05 VDC Resolution

Current: 0.1 A Resolution (<10 A)

Time Remaining: One (1) Minute Resolution

Temperature: Accurate to within 1° C

### **Outputs:**

CAN (Dual or Single)

RS-422

### **EMI/EMC Standards Compliance:**

MIL-STD-1275

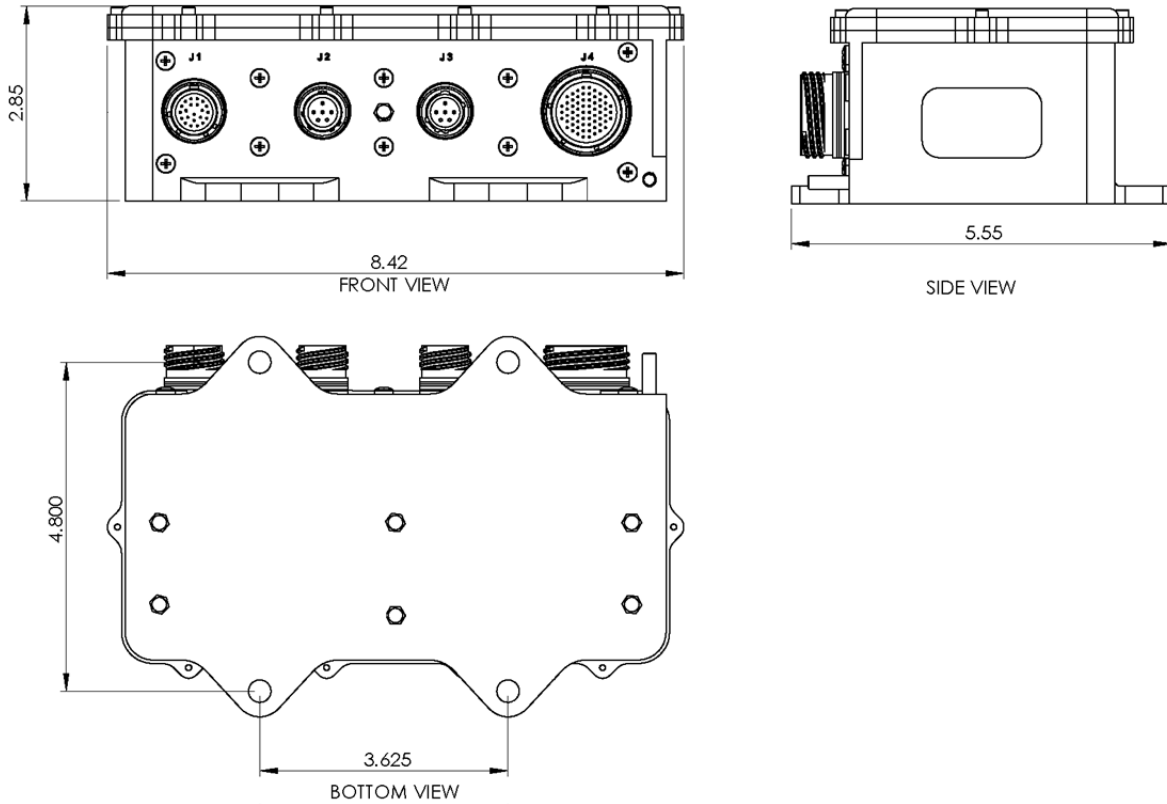
MIL-STD-461F

### **Environmental Standards Compliance:**

MIL-STD-810G

***\*Exceeds TACOM ATPD-2406A Performance Requirements***

OUTLINE/INSTALLATION DRAWING – BMS CONTROL UNIT (CU)



OUTLINE/INSTALLATION DRAWING – SHUNT SENSOR MODULE (SSM)

