

## ACCURATE REAL-TIME BATTERY MONITORING

Merlin Power Systems' DataCell II is an advanced Battery Monitoring System (BMS) that accurately measures battery State-of-Charge (SoC), State-of-Health (SoH), voltage, current, temperature and time remaining for up to four (4) battery banks simultaneously.

Armed with this crucial battery status information, vehicle commanders and maintainers can have confidence in their vehicle's capabilities and make informed power management decisions.

Intelligent power use reduces SWAP (Size, Weight and Power) by producing more usable power from existing assets. It also reduces fuel use, extends battery life, and improves battery performance. The DataCell II is a COTS (Commercial-off-the-Shelf) and GOTS (Government-off-the-Shelf) product.

## PRECISE CHARGE LEVEL REPORTING

Accurate State-of-Charge (SoC) data informs the user exactly how much energy remains in each battery bank on the vehicle. Additionally, the DataCell II provides an "at a glance" indication of whether batteries are charging or discharging, and by how much.

## IDENTIFY BAD BATTERIES BEFORE THEY FAIL

With accurate State-of-Health (SoH) information, vehicle maintainers can identify batteries that need to be swapped out *before* they fail during a mission.

## TIME REMAINING

The Time Remaining parameter reported by the DataCell II lets the user know how much time batteries can be allowed to continue discharging before charging must be resumed.

## J1939 CAN BUS COMPATIBLE

The DataCell II conforms to the J1939 standard to display battery data on the existing vehicle display or optional remote LCD panel.

## PC CONFIGURABLE

The DataCell II can be configured using a PC for different vehicles and battery types.

## BASIC SYSTEM DIAGNOSTICS

The DataCell II comes with PC-based diagnostics and data logging for easy vehicle troubleshooting.

## LOW POWER CONSUMPTION

The DataCell II's power consumption is extremely low compared to that of other competitive products.



## SPECIFICATIONS

### **Part Number:**

DC2-7201

### **Nominal Power Consumption:**

25 mA

### **Normal Operating Voltage:**

8 to 40 VDC

### **Component Size:**

Control Unit (CU): 7.13" W x 4.02" D x 2.09" H

Shunt Sensor Module (SSM): 4.88" W x 3.19" D x 3.07" H

Remote Display Panel: 5.94" W x 2.36" D x 2.64" H

### **Component Weight:**

Control Unit (CU): 1.10 lbs.

Shunt Sensor Module (SSM): 1.30 lbs.

Remote Display Panel: 0.66 lbs.

### **Outputs:**

CAN Bus

RS-422

### **Operating Temperature:**

-25° C to +105° C

### **Storage Temperature:**

-55° C to +150° C

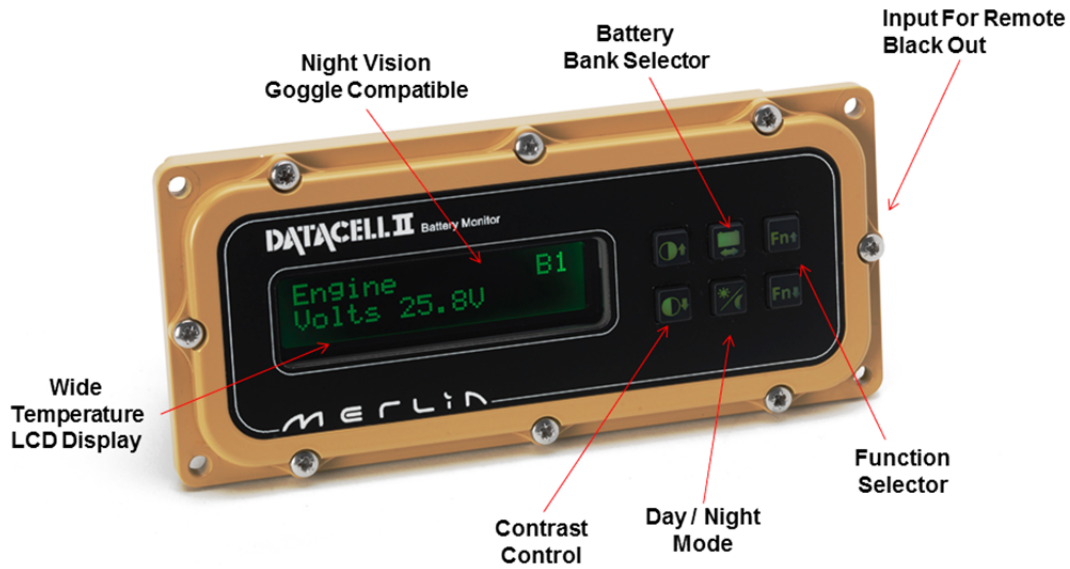
### **EMI Standards Compliance:**

Designed to MIL-STD-461F

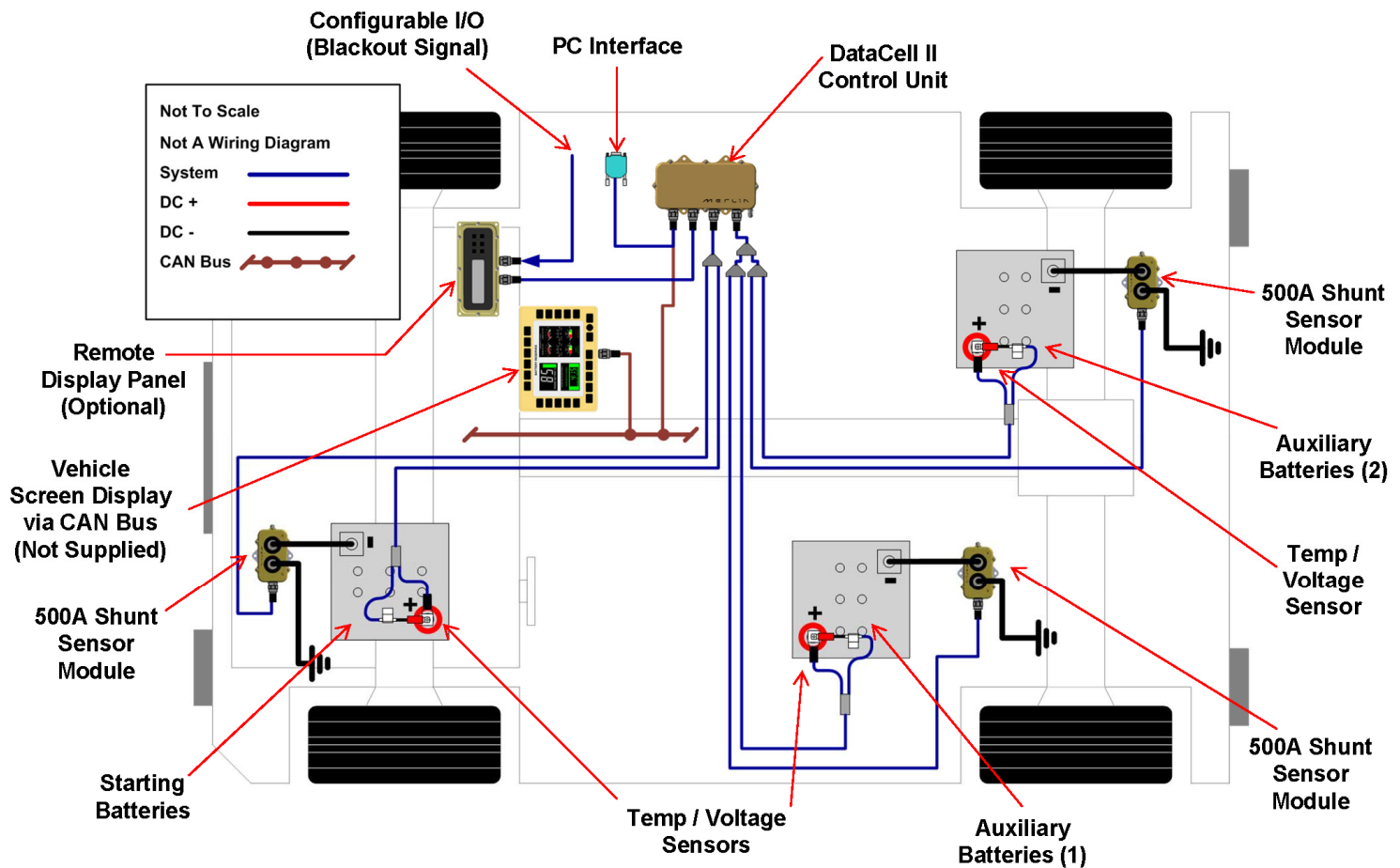
### **Environmental Standards Compliance:**

Designed to MIL-STD-810G

## REMOTE DISPLAY PANEL DETAIL

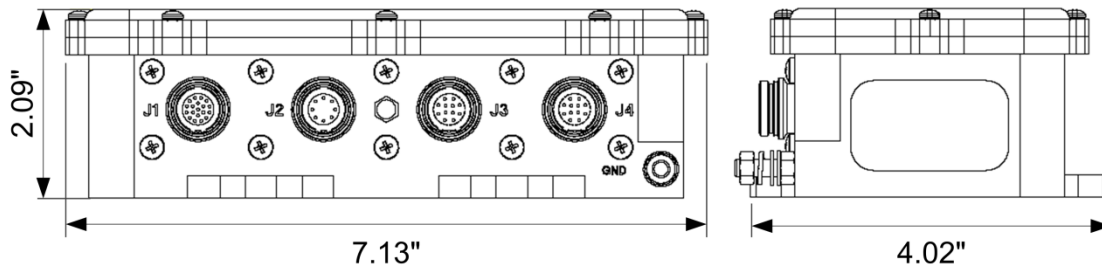


## SYSTEM OVERVIEW

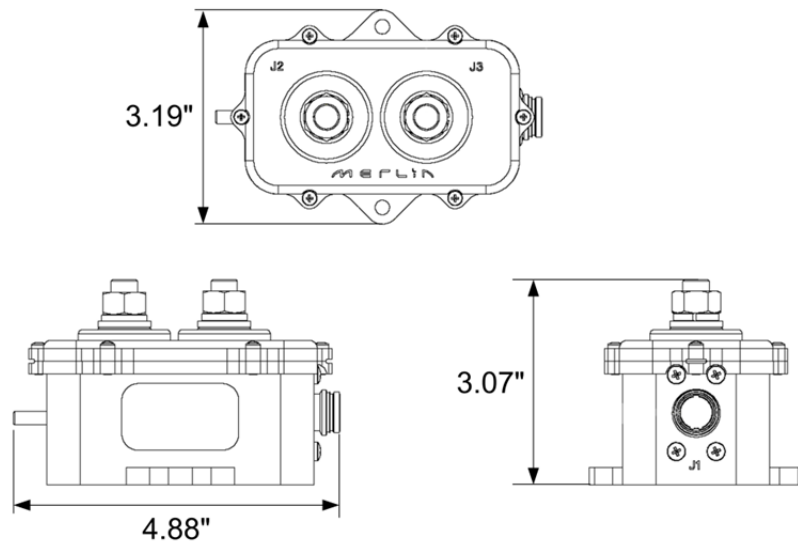


OUTLINE/INSTALLATION DRAWINGS

Control Unit (CU)



Shunt Sensor Module (SSM)



Remote Display Panel

