

## SMARTBANK - SPLIT CHARGING SYSTEM

SmartBank is an advanced stand-alone split charging device allowing two battery banks on a military vehicle to be charged from a single or multiple charge sources. The product is bi-directional so will allow charge to both battery sets irrespective of whether the charge source is connected to the engine or the mission batteries.

During discharge, Smartbank disconnects the two sets of batteries from each other preventing mission loads from drawing too much power from the engine batteries - protecting vehicle starting capability. The level at which it separates the banks is configurable to use as little or as much capacity as desired from the engine batteries to supplement the mission bank. This feature can allow silent watch run times to be increased on vehicles where space and weight considerations dictate that smaller battery capacities than desired can be installed.

In an emergency a dash mounted switch connected to SmartBank can be used to parallel both banks of batteries together (for example for engine starting).

### Automatic charge management of two battery banks from single or multiple charging sources

### Can be configured to increase silent watch run times

# Parallel feature allows all batteries to be manually connected together in an emergency

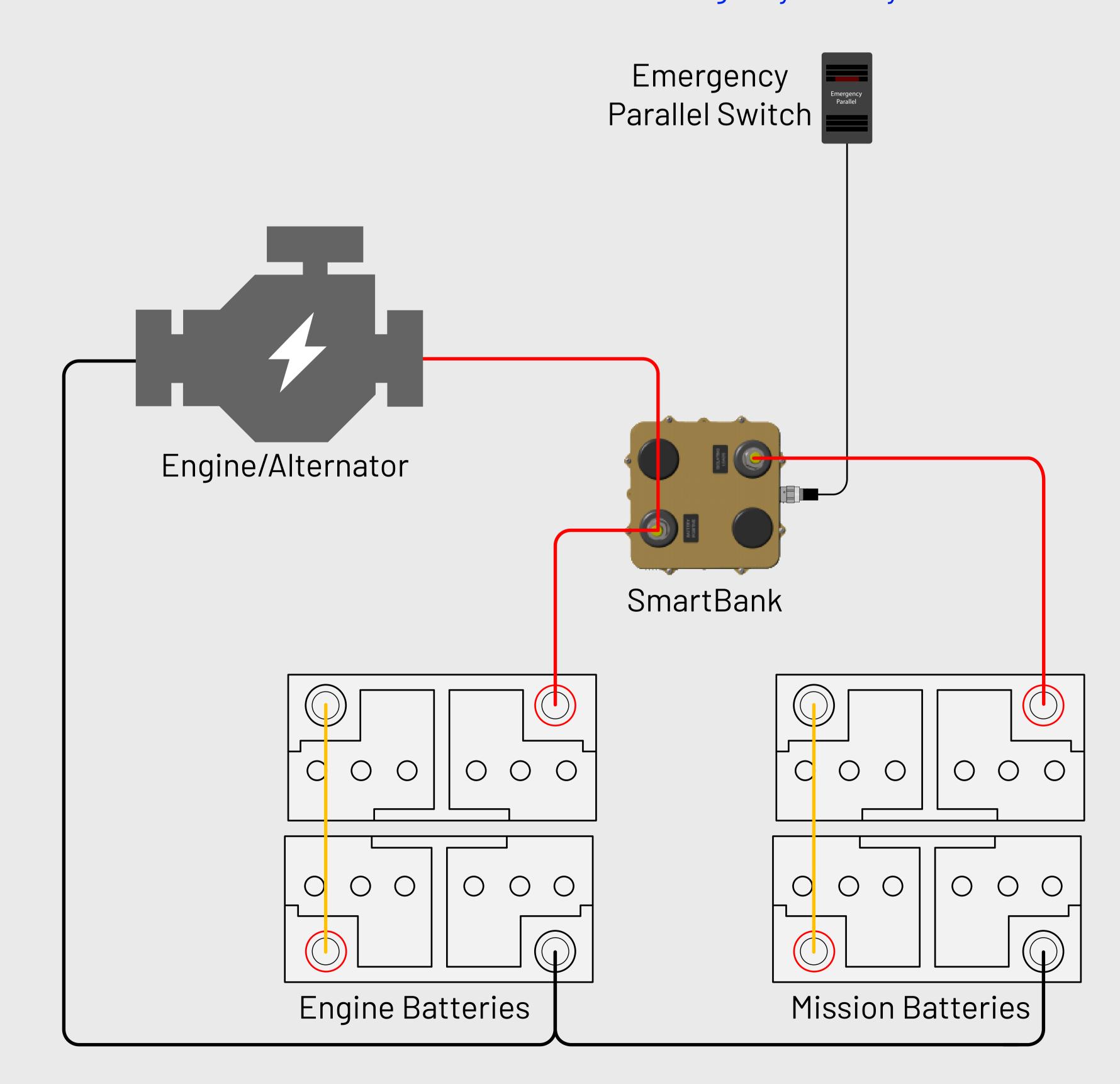
# Bi-directional charge sources can be connected to either the engine and mission batteries and will still charge both

- Designed to military specifications



### **Installation Example:**

The overview below shows SmartBank installed between the engine and mission battery banks. It is also connected to a dash switch for Emergency Battery Parallel.

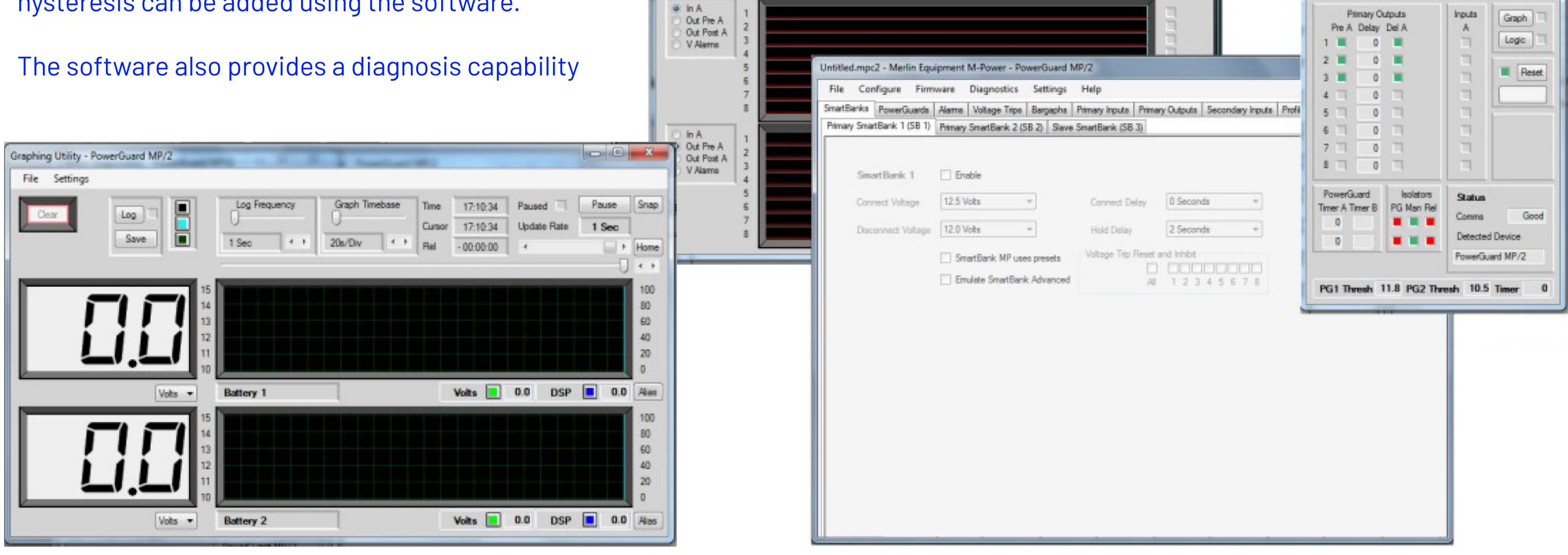




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#### **Software:**

SmartBank is supplied PC software allowing the configuration of split charge connection and disconnection levels. Although SmartBank filters battery data to avoid reacting to nuisance voltage spikes and droops, further time delays and hysteresis can be added using the software.



Logic Trace Utility - PowerGuard MP/2

Isolator Relay 1

Manual Isolation 1

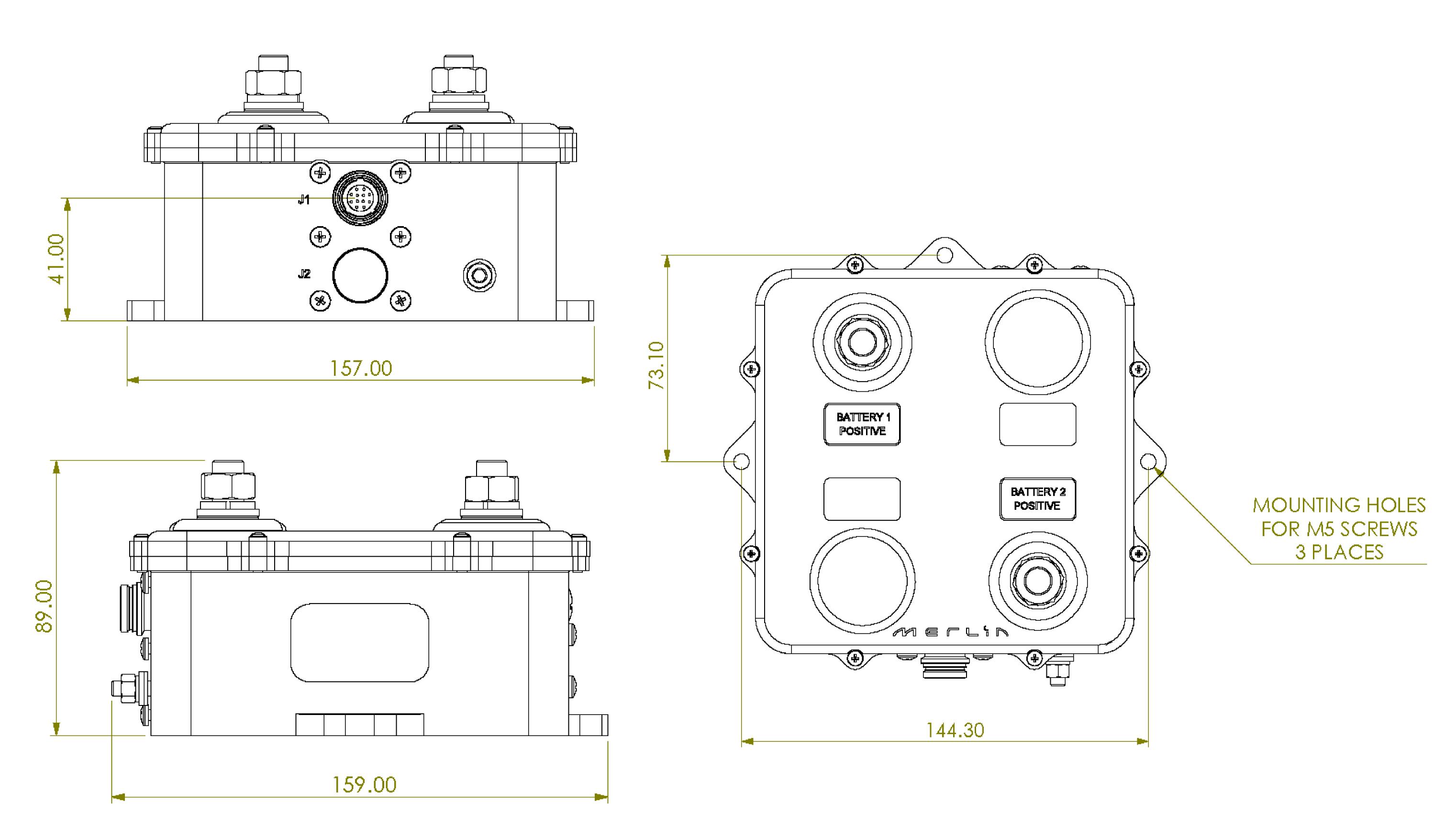
Manual Isolation 2

PG Control 1

PG Control 2

Cursor 17:11:31

Cursor t=0



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Main Diagnostics - PowerGuard MP/2

Battery Data

0.0 0.0

Battery 2

Volt Alarms

Timer Trig