

VBMS - VEHICLE BATTERY MANAGEMENT SYSTEM

VBMS includes our DataCell IIE Battery Monitor (see datasheet) and combines it with intelligently controlled power gateways that automatically control the charge to each battery bank on-board and in turn how little or much they supplement each other during discharge. The gateways also allow battery banks to be turned on and off via a centralised control and monitoring panel on the vehicle dash and automatically protect each battery bank from over-discharge prolonging their life.

This automated system is configured in software for different vehicle types accommodating different battery setups and mission profiles.

VBMS can improve silent watch times by 25-50% by "power sharing" during discharge. By ensuring batteries work within their design parameters, vehicles are also far less likely to experience "power brownouts" during missions - which are a serious safety issue. Battery replacement costs are also reduced as well as fuel usage and engine maintenance (crews can see when the engine needs to be run to provide charge to batteries rather than idling when it's not needed).

– **Suitable for up to 4 battery banks**

– **Monitors**

voltage, state of charge (% remaining), state of health (% remaining), temperature, time remaining (hrs/mins) and net charge / discharge (amps)

– **Intelligently controls Power Gateways**

to maintain the best charge / discharge efficiency and protect batteries from damage

– **Improves crew safety**

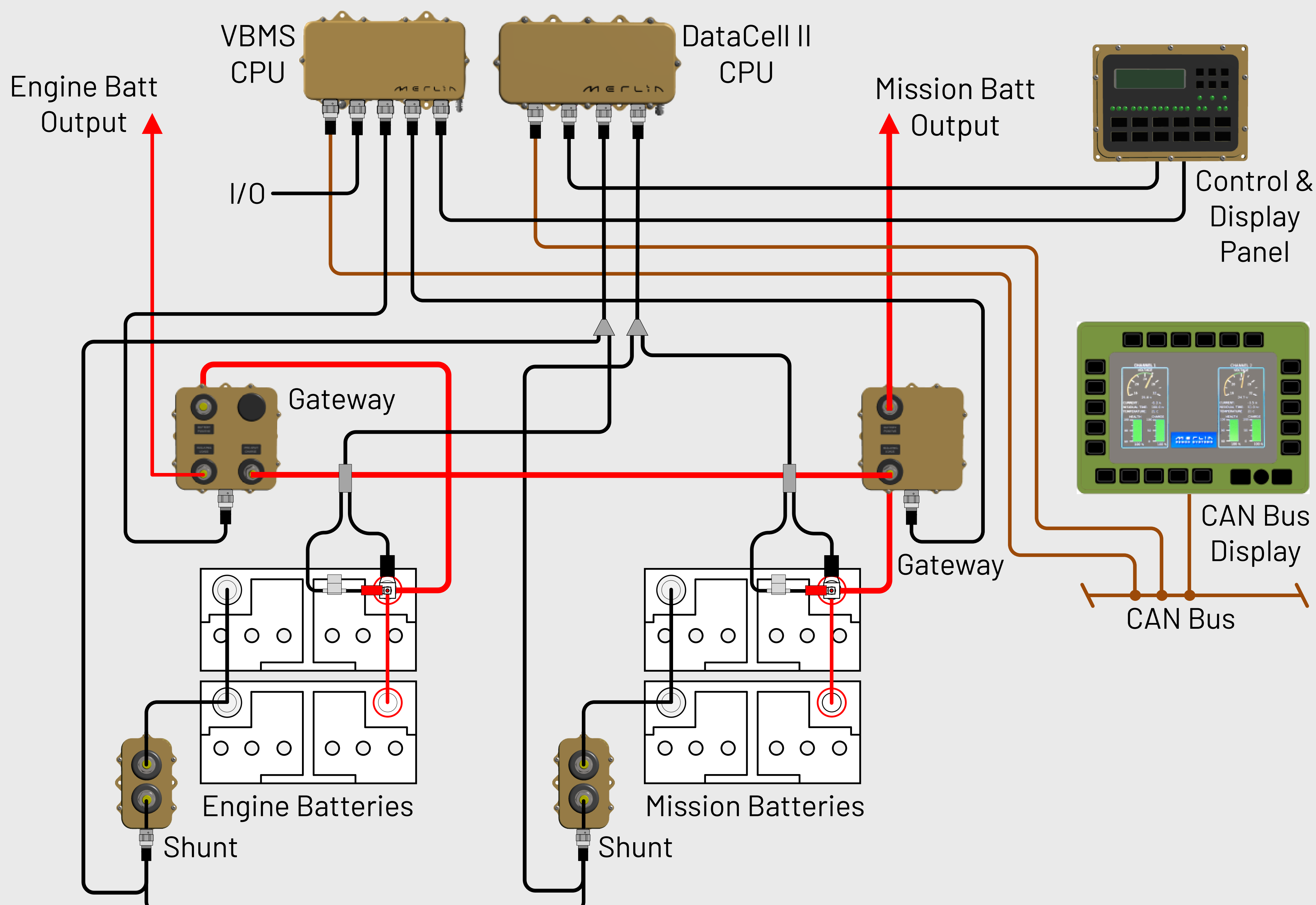
as well as saves money on unnecessary battery replacements and fuel

– **Designed to military specifications**

Installation Example:

The overview below shows a two battery bank installation and VBMS connected to both its own LCD display and to a vehicle CAN Bus network.

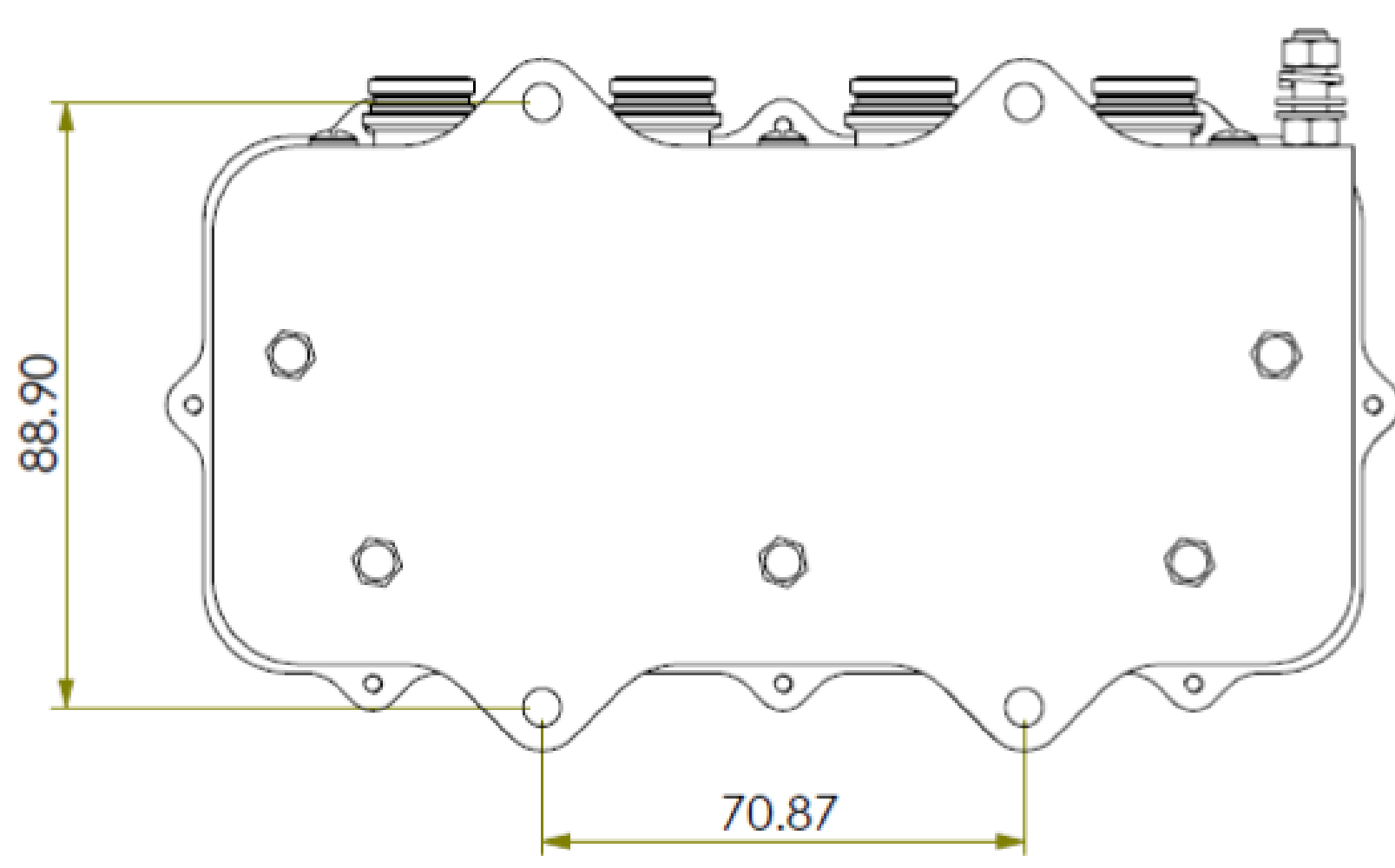
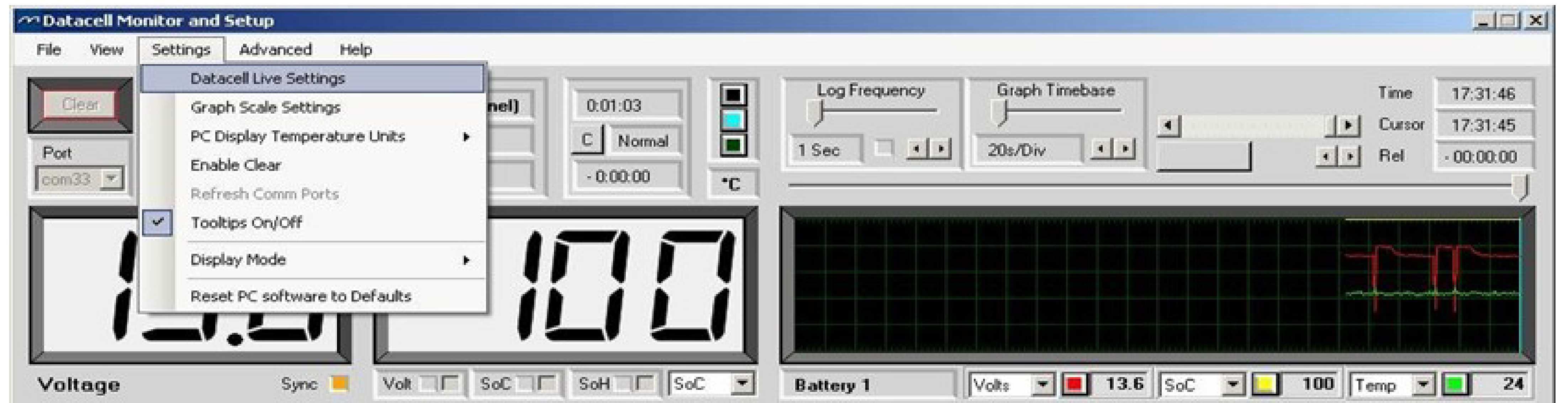
Current shunts are available rated at either 500A or 1000A. Power Gateways are available with different current ratings dependent on alternator size.



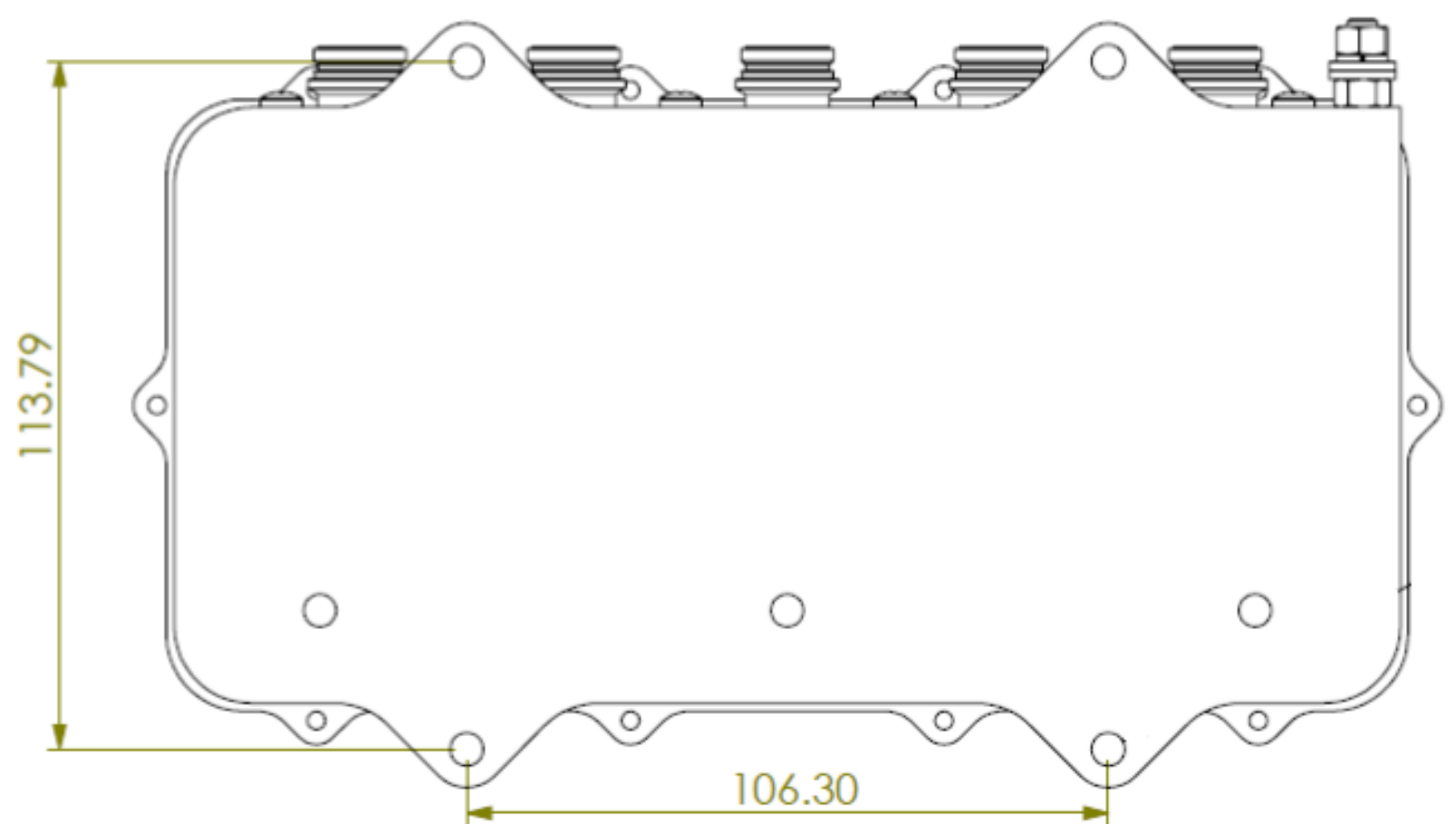
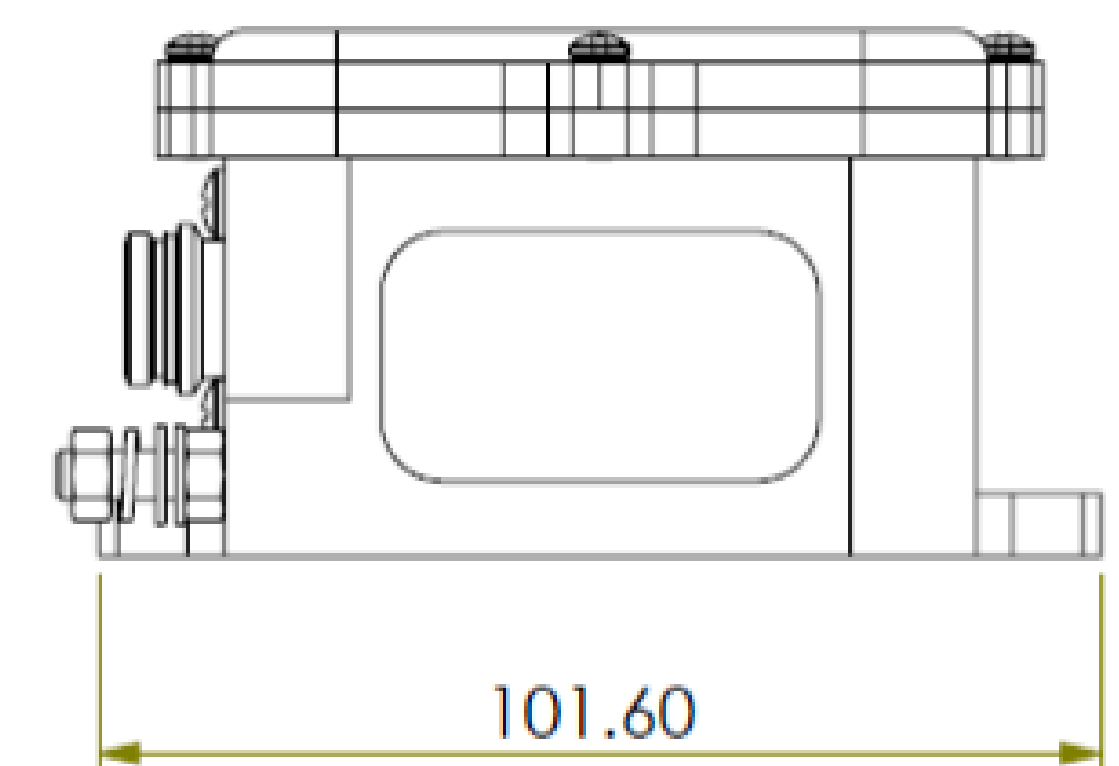
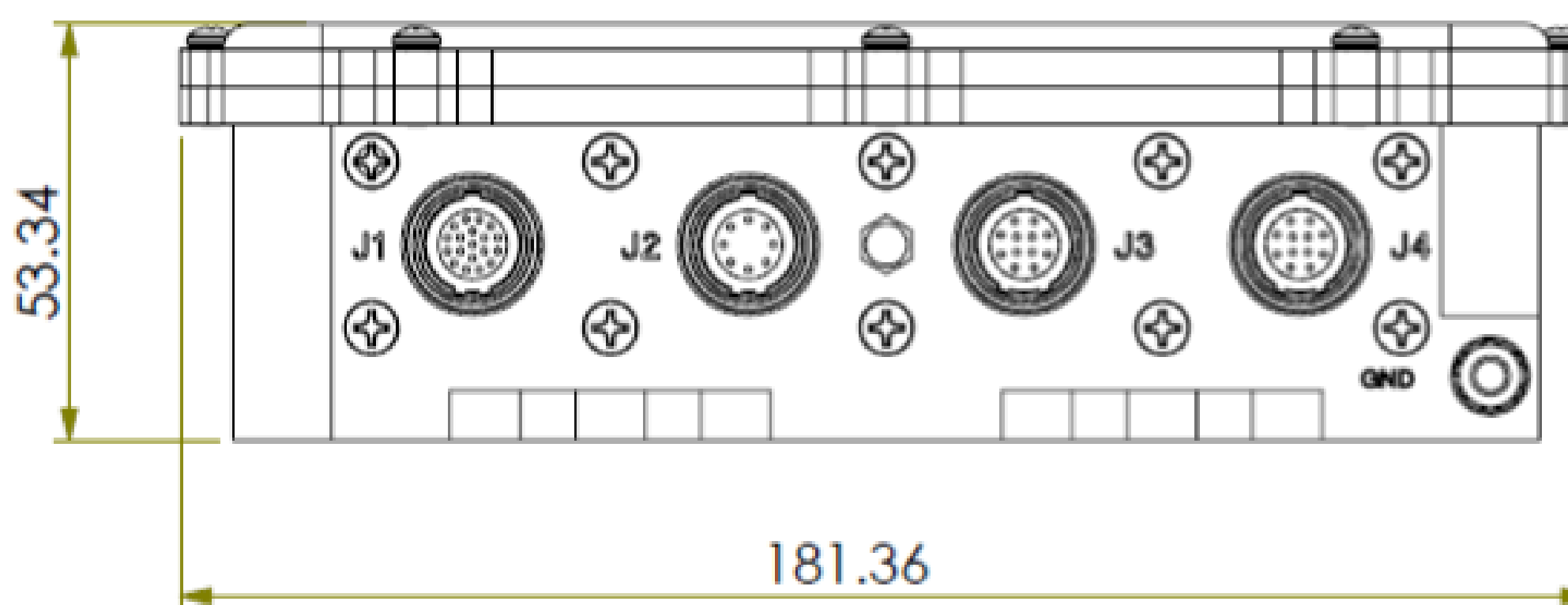
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Software:

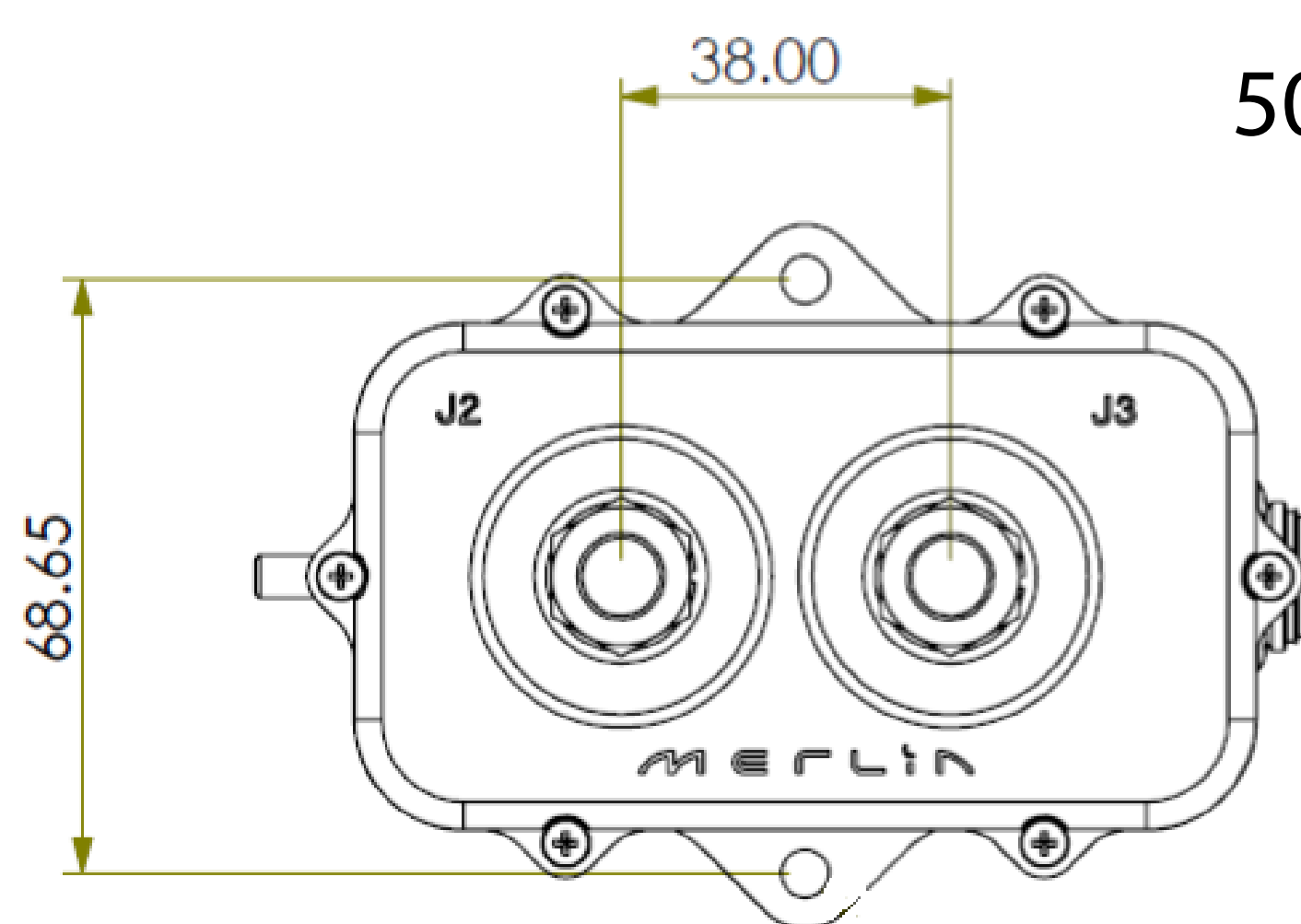
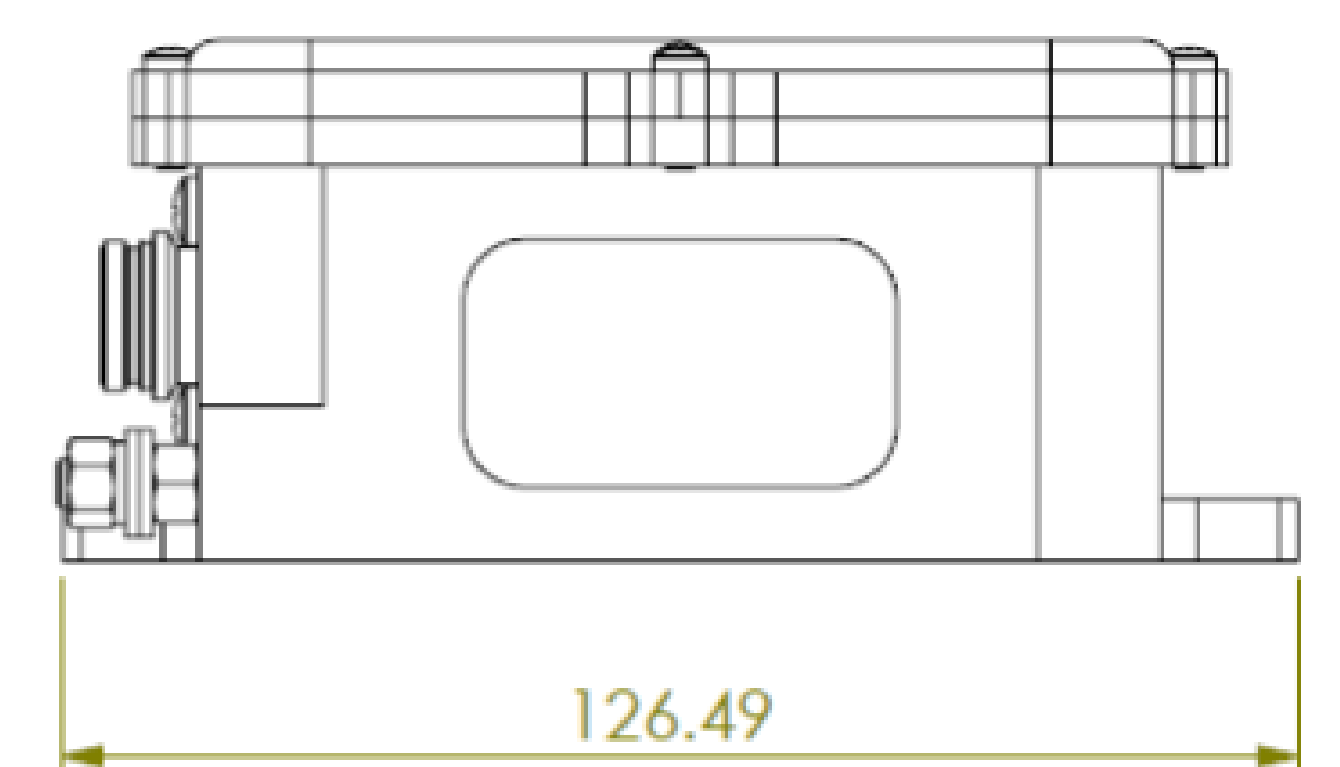
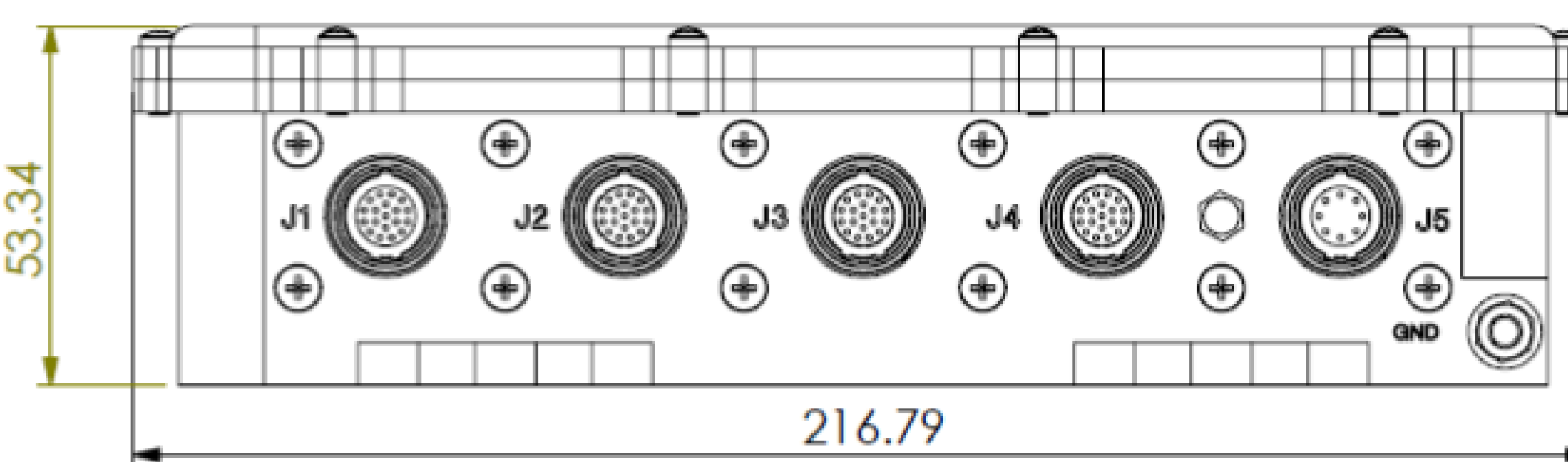
VBMS is supplied with windows software allowing user configuration and real time monitoring and datalogging.



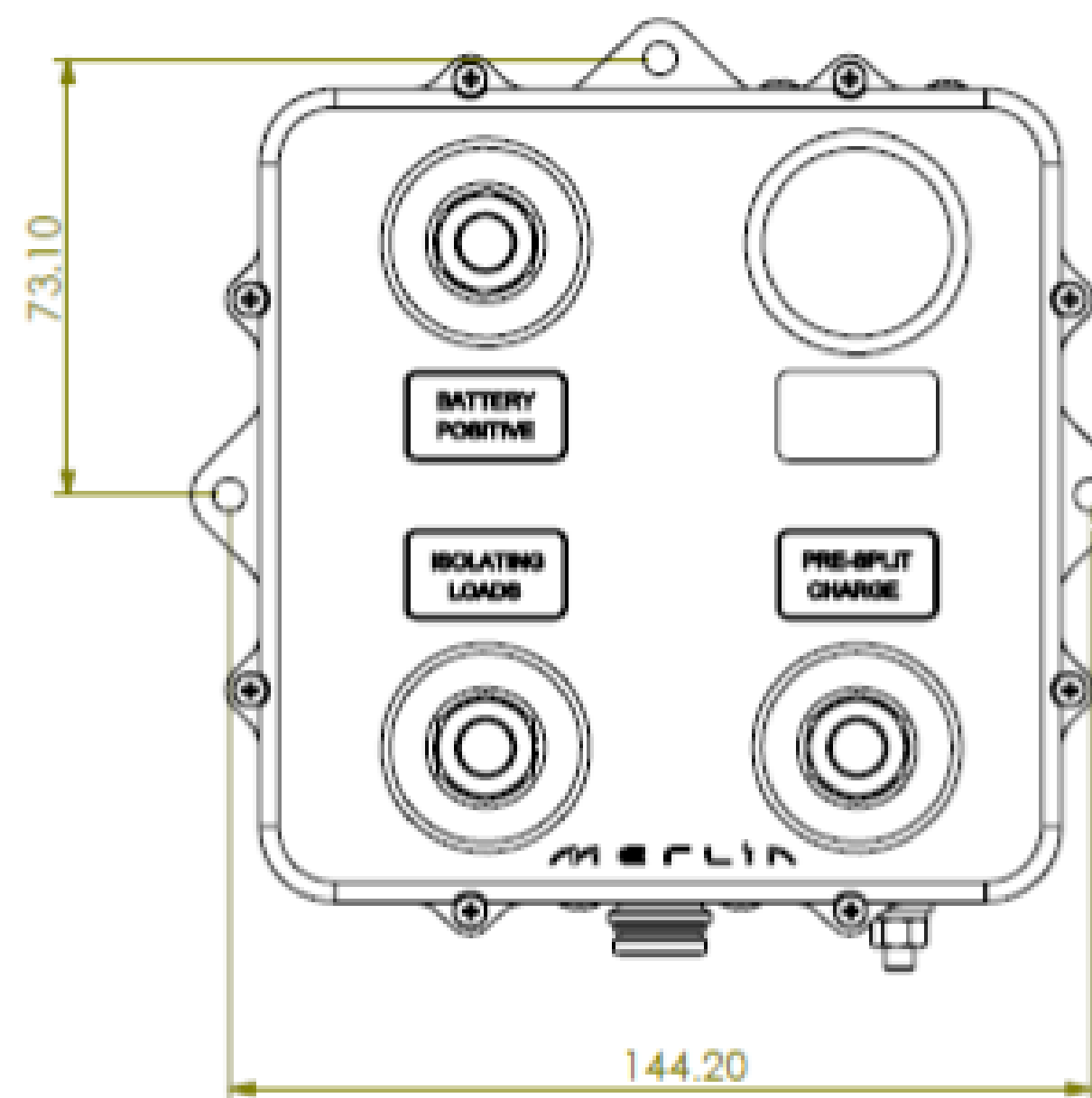
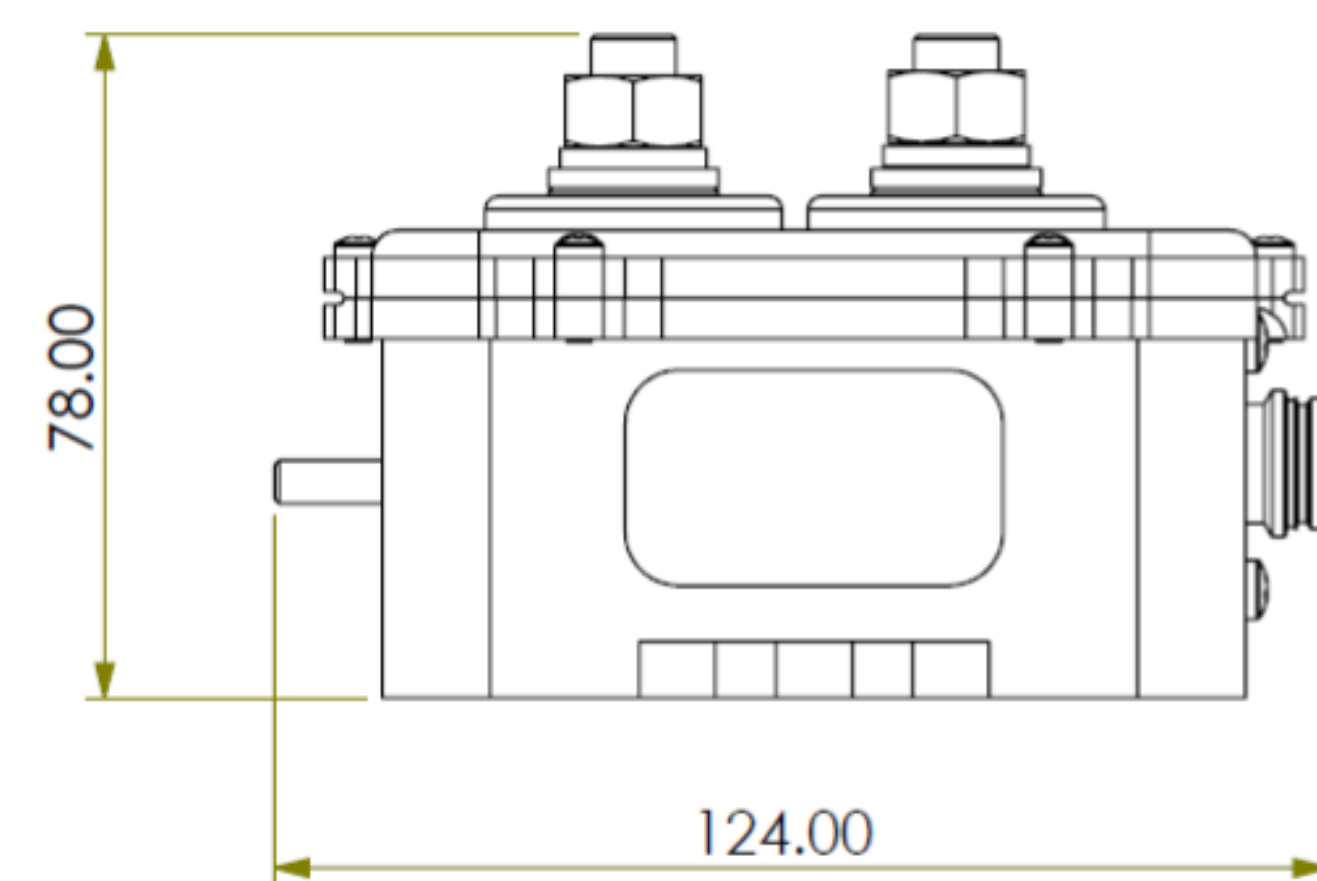
Batt Monitor CPU



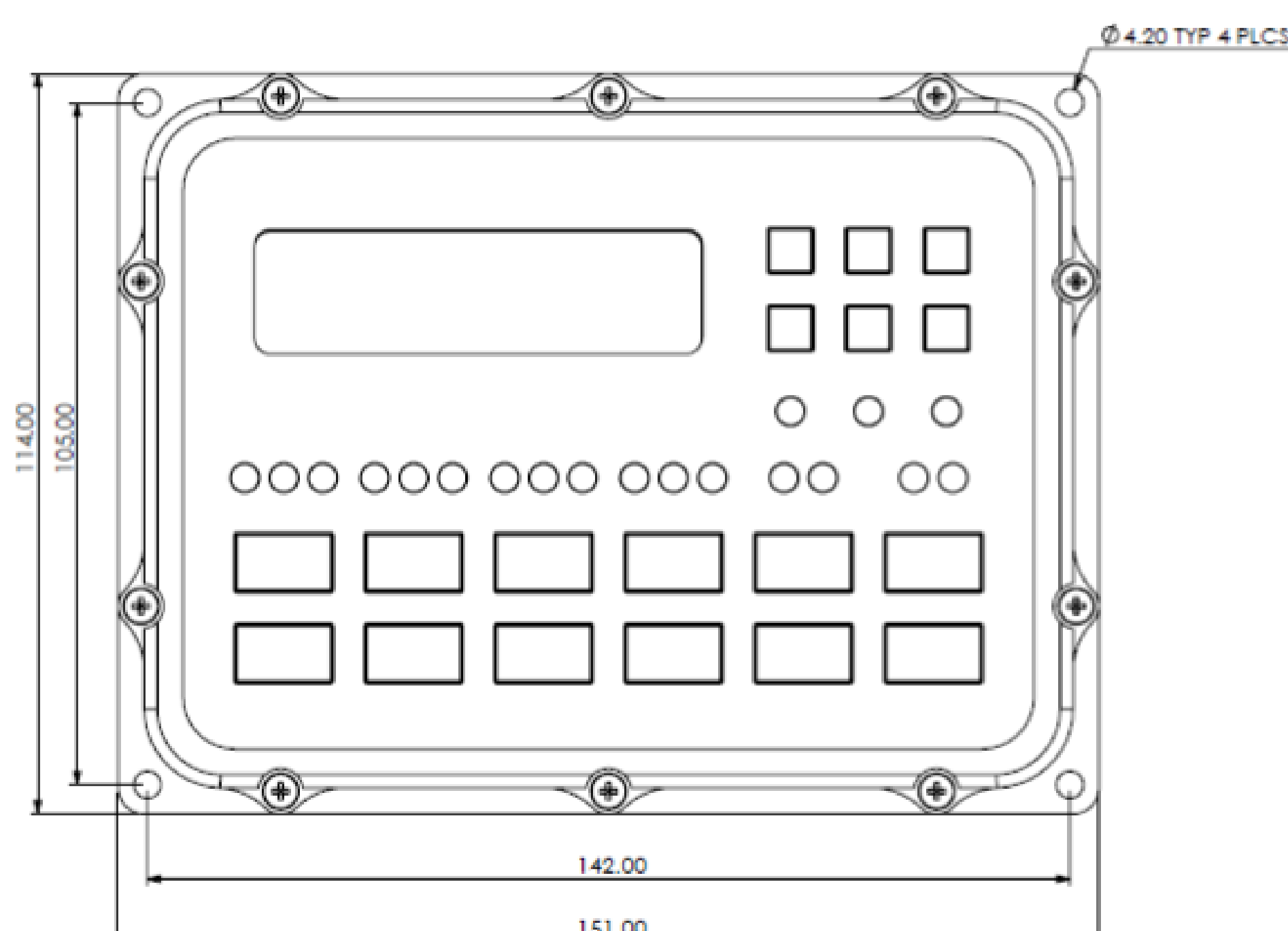
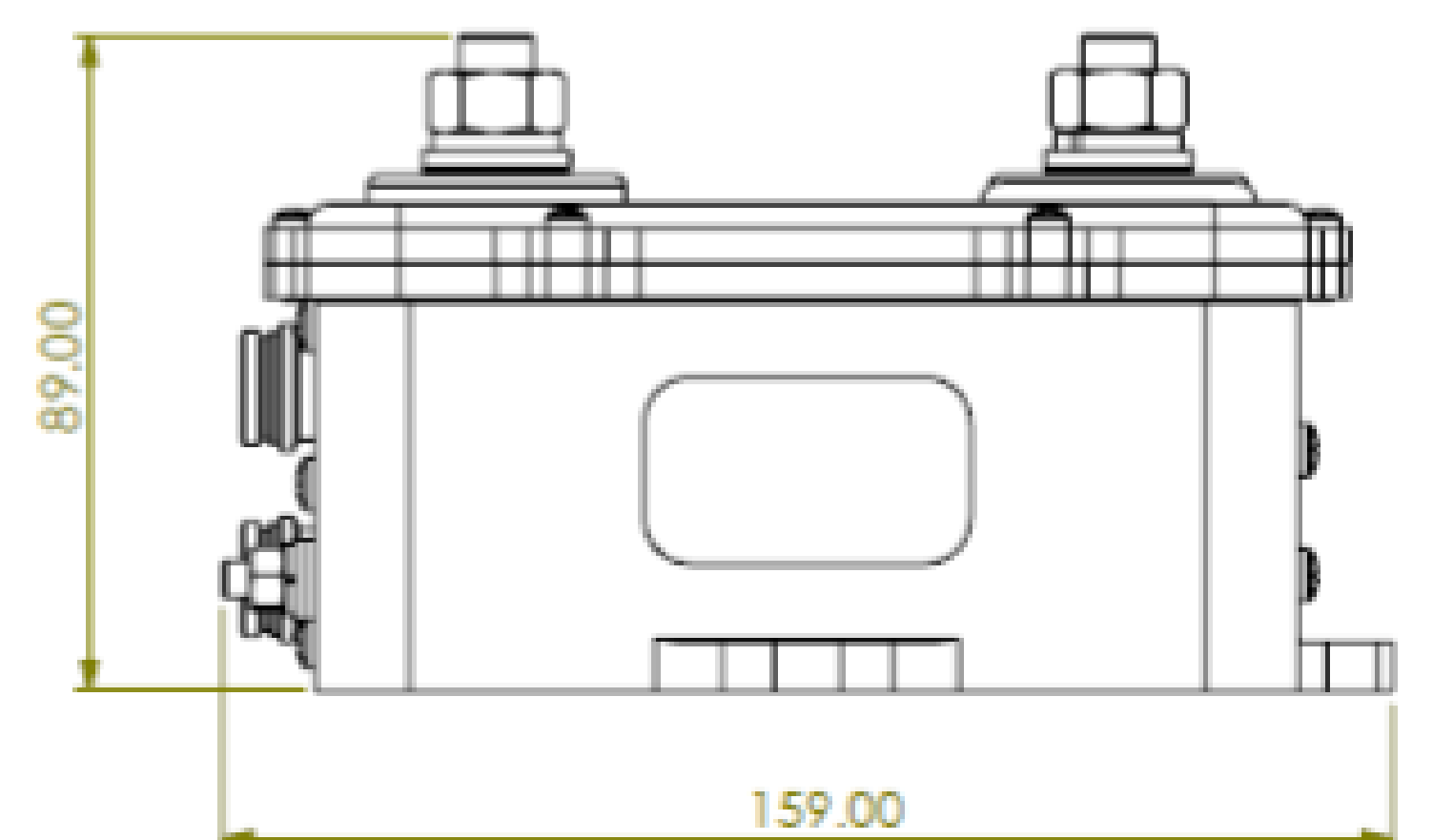
Batt Management CPU



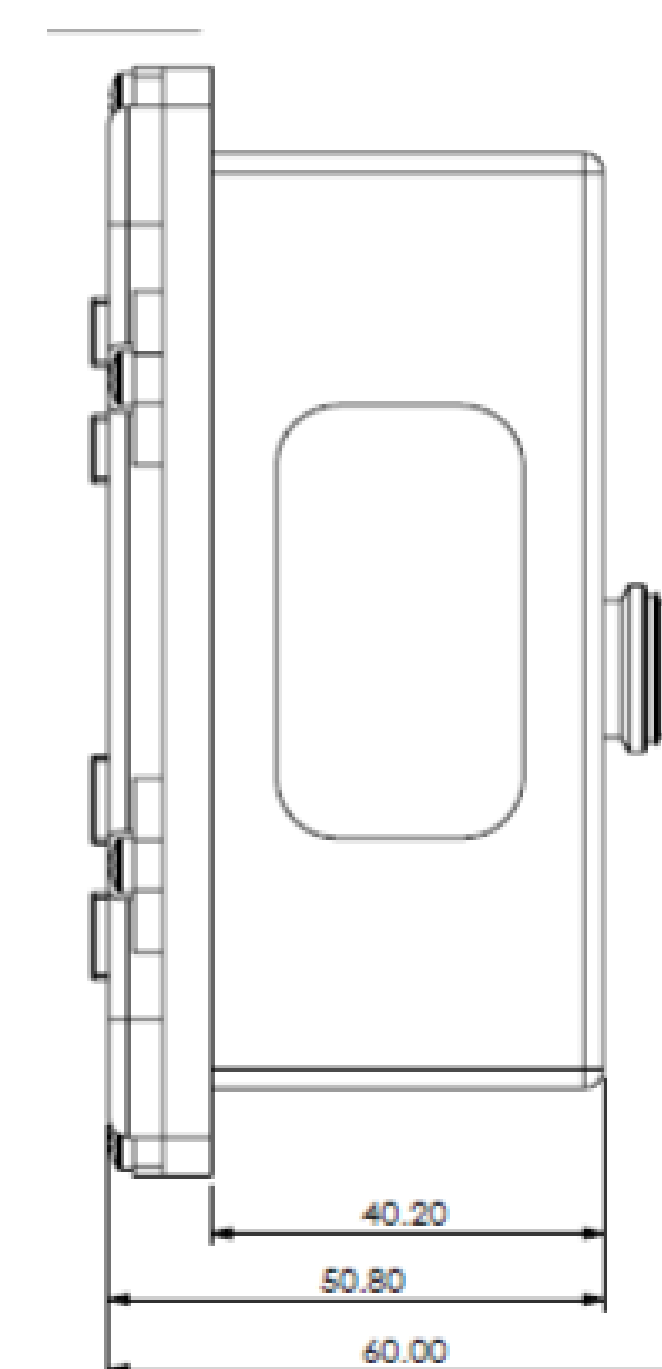
500A Shunt



Power Gateway



Control & Monitoring Panel



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