

**PRODUCT BRIEF**

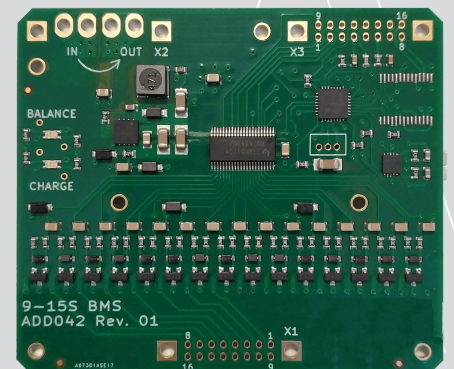
**15S  
BATTERY  
MONITOR  
AND  
BALANCER**

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**The 15S Battery Cell Monitor & Balancer is a precision instrument that ensures multi-cell batteries are maintained in an optimal state, improving system reliability and prolonging battery life.**

The 15S Battery Cell Monitor & Balancer does exactly as its name suggests: it monitors cells within a battery, and it balances those cells if and when they require it. Comprehensive data detailing the battery's internal state is sent via the CAN interface.



## FEATURES

- Transforms a “dumb” battery into a smart (self-balancing) battery.
- Supports multiple battery chemistries – LiPo, LiS and LiFe.
- Supports 9 to 15S batteries.
- Galvanically isolated 80 Amp current sensor.
- External current sensor input for > 80A.
- CAN interface provides control and monitoring of voltages, currents, temperatures.
- Battery temperature monitoring with up to 3 external sensors.
- "Heat" / "Cool" control outputs for temperature regulation.
- User-friendly configuration software.
- Rich variety of balancing control options.
- Seamless integration with our Generator Control Unit.
- Weight: TBA
- PCB dimensions: 62 x 72mm

## USAGE

The Battery Balancer is intended to be connected to a battery, installed into a UAV and interfaced to the vehicle's CAN bus. A pair of indicator lights on the front panel give a “go / no go” indication of the battery's state of balance and state of charge. More detailed battery information is available via the CAN bus.



Use of the battery balancer confers a number of operational advantages:

- Batteries do not need to be removed periodically to check for balance.
- Battery status is available instantly, either directly from the front-panel LEDs, or remotely from the telemetry data sent on the CAN bus.
- Batteries are maintained in a state of balance, improving flight-readiness.

## SPECIFICATIONS IN BRIEF

### Electrical

<b>Battery chemistries</b>	LiPo, LiS, LiFe
<b>Battery voltage</b>	65 VDC maximum
<b>Battery cell count</b>	9-15S
<b>Battery temperature sensor</b>	3x 10k NTC (external)
<b>Balancing current</b>	3x 0.45 Apms (max.)
<b>Voltage Measurement accuracy</b>	+/- 10mV (typ.)
<b>Power dissipation</b>	6 Watts (max.)
<b>Visual indicators</b>	Balance (red/green), charge (red/green)

### Miscellaneous

<b>Environmental protection class</b>	IP50
<b>Operating temperature range</b>	-40°C to +55°C
<b>Altitude rating</b>	10,000m
<b>Cooling</b>	Passive conduction & convection
<b>Enclosure</b>	77 x 75 x 12.7mm
<b>Connectors</b>	Option of Harwin M80 or Hirose DF11 series
<b>Communications protocols</b>	CAN (1Mb/S)



SPECIFICATIONS