

# DataCell 1 Battery Monitor



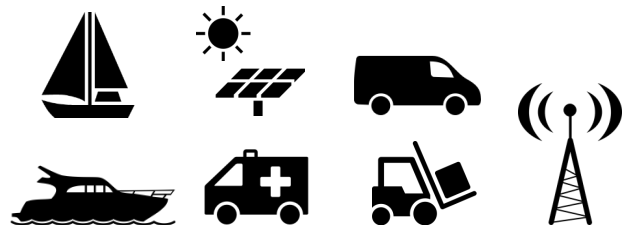
- Model Based Battery Monitor for up to 4 independent 12 or 24V battery banks 50-2000Ah.
- Never runs out of synchronisation with batteries & more accurate than shunt based Ah counters—even when batteries are in standby for long periods.
- Provides voltage and SoC%. May be datalogged using supplied software.
- 8 x configurable Inputs & Outputs for controlling generator stop start, alarms, load shedding etc. Alarm contacts for auto start/stop of generators, load shedding, external alarms etc.

DataCell provides Battery Voltage and State of Charge (SoC%) information for up to 4 independent battery banks.

DataCell uses Merlin's unique battery monitoring algorithms and data models to provide super accurate data that (unlike all other monitors) never runs out of synchronisation with your batteries.

DataCell may be used as a normal battery monitor (using optional display panel or supplied PC software) or as a discrete stand-alone module for system automation, data-logging or reporting to an RS232/CANbus data network (optional).

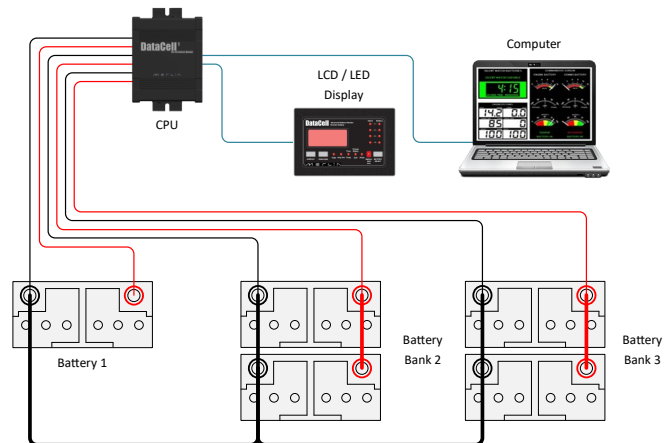
DataCell is currently employed in a vast array of applications including: Vehicles – with CANBus output to integrate to an existing multi-function display; Boats – with remote panel as a 1, 2, 3 or 4 channel battery monitor; UPS & Back Up Power – RS232 interface to building and management system while DataCell also manages auto start/stop of back up generators & alarms with built in I/O.



## Installation Example:

DataCell 1 is available for use with 1, 2, 3 or 4 individual battery banks. Just two wires are connected to each battery. Data may be read using (supplied) computer link and software and/or optional remote panel.

Set up and configuration is completed using the supplied PC link and software. The software also includes a datalogging module for gathering battery data.



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## Specifications:

<b>PART # (STANDARD PRODUCT)</b>	<b>19-6002</b>	<b>19-6003</b>	<b>19-6004</b>	<b>19-6005</b>
<b>PART # (W/CANBUS OUTPUT)</b>	<b>19-6040</b>	<b>19-6041</b>	<b>19-6042</b>	<b>19-6043</b>
NUMBER OF BATTERY BANKS	1	2	3	4
NOMINAL VOLTAGE	12 or 24V DC			
VOLTAGE RANGE	9-40V DC			
12V MEASUREMENT RANGE	18-34V DC			
24V MEASUREMENT RANGE	9-17V DC			
POWER CONSUMPTION	<5mA (with CAN active <25mA)			
RECOMMENDED BATTERY SIZE (@20HR RATE)	50-2000 Ah Per Battery Bank			
OVERALL DIMENSIONS LxWxH	90 x 110 x 32 mm (3.54 x 4.33 x 1.26")			
WEIGHT (EX CABLES)	207g (0.46 lbs)			
COMPLIANCE	CE marked meeting EMC Directive 2004/108/EC & LVD2006/95/EC complying with EN60335-1m RoHS 2002/95/EC			



**Independently Verified:** Merlin Battery Monitoring Technology has been independently verified by the World's largest industrial battery manufacturer, EnerSys.

The EnerSys test was over 35 battery cycles with varied temperatures, load and recharge rates. Total Ah consumed error was 1.24%, State of Charge % error was 0.15%, Time Remaining Error from full to flat was 0.68% and Time Remaining from ¼ charged to flat was 0.03%. EnerSys concluded that at all times the Merlin Technology was “more than capable of producing under normal conditions, SoC and SoH readings with an accuracy within 1 or 2%”.

## DataCell Remote Panels

Optional “Plug & Play” remote panels are available to allow viewing of Voltage, State of Charge % and alarms. Available with alphanumeric LCD display or large format red LED display. Dimensions (HxW): 80 x 122 mm (cut out 70 x 112 mm, max depth 40mm).

Part #	DataCell + Panel Bundle	
	LED Panel	LCD Panel
1 Battery	19-6014	19-6010
2 Battery	19-6015	19-6011
3 Battery	19-6016	19-6012
4 Battery	19-6017	19-6013

Above: DataCell LCD Panel (P/n: 19-6100). Right DataCell LED panel (P/n: 19-6101). Also available as a bundle package with DataCell.

