

PowerBank Lite Battery Management system



PowerBank Lite is a less powerful version of PowerBank, designed for those who want many of the PowerBank features but for smaller electrical systems. PowerBank Lite provides split charging, low battery protection and isolation for up to two separate battery banks.

The unit controls charging from any number of charge sources (typically single or twin alternators, battery charger and solar/wind power). It also controls how the two battery banks supplement each other during discharge, allowing the installer to balance a system. This ensures that batteries provide power for the maximum time possible, without reducing their cycle life

through over discharge (or compromising engine starting).

The same PowerGuard flat battery contactors are also used to provide manual remote battery isolation with a single kill switch, or individual switches. Controlling contactors intelligently for dual purposes cuts down the number required and therefore, the overall cost. A number of PowerGuard Lite's primary outputs and alarm signals can be used to create a wide range of custom remote panels if required, to include switches, third party equipment and LED's. These can also be used to activate external relays to auto start generators etc. An equal number of inputs can be used to allow the unit to react to situations outside its control.

Using software to program the system's functionality allows us to vastly increase flexibility. For example, flat battery protection thresholds can be selected all the way from 12.7V down to 10.5V system. This allows a starter battery to be protected at a level

appropriate for engine starting and at the same time, a deep cycle auxiliary to be discharged much lower. In addition, if the settings prove to be inappropriate, a new program can be downloaded to a vehicle by plugging in a laptop.

Product Highlights

- **Fully programmable, voltage controlled split charging/ discharging of two battery banks. Allowing you to decide how much you prioritise alternator power for the aux/ house batteries during charge and how you allow the starter battery so supplement aux/house loads during discharge**
- **Individual or simultaneous control of both battery isolation circuits from a remote location (helm/dash), allowing you to prevent power drain when the vehicle is not in use and kill all power in an emergency**
- **Individual programmable low voltage protection for each bank, greatly prolonging battery life**
- **Remotely operated parallel feature allows emergency starting from the aux/house batteries**

PowerBank LITE SPECIFICATION	
INPUT VOLTAGE RANGE	7-40V DC
POWER INPUTS	2 INDIVIDUAL (AUTO SELECTION)
MEASUREMENT VOLTAGE RANGE	5-36V DC
VOLTAGE ACCURACY	0.3%, RESOLUTION 0.05V DC
CURRENT CONSUMPTION	0.015A (PLUS ACTIVATED RELAYS)
COMMUNICATIONS PROTOCOL	RS422 FULL DUPLEX 250,000bps
OUTPUT DATA PROTOCOL	RS232 SELECTABLE bps
SOFTWARE COMPATIBILITY	WINDOWS XP / VISTA PLATFORMS
SPLIT CHARGE CONTROL	2 BATTERY BANKS
SPLIT CHARGE CONNECTION VOLTAGES	12.5-14.0V DC / 25-28V DC (ADJUSTABLE / TIMED)
SPLIT CHARGE DISCONNECTION VOLTAGES	12-13.5V DC / 24-27V DC (ADJUSTABLE / TIMED)

PowerBank LITE SPECIFICATION	
BATTERY ISOLATION	1 TO 2 BATTERY BANKS
FLAT BATTERY CONTROL	1 TO 2 BATTERY BANKS
FLAT BATTERY CONTROL VOLTAGES	10.5-12.7V DC / 21-25.4V DC (ADJUSTABLE / TIMED)
PRIMARY INPUTS	8 (PROGRAMMABLE)
PRIMARY OUTPUTS	8 (PROGRAMMABLE)
PRIMARY ALARMS	4 (PROGRAMMABLE)
MULTIPLEX COMPATIBLE	VIA ADDITIONAL MODULES
MAXIMUM MULTIPLEX LATENCY	50ms
OPERATING TEMPERATURE	-25C TO 105C
DIMENSIONS (MM)	HUB L 160 X W 118 X D 45
WEIGHT	0.3Kg (EX CONTACTORS)
APPROVALS	CE, E-MARK