

# BATTERY PLUS35-II



BM PRO's BatteryPlus35-II is a battery management system designed specifically for use in recreational vehicles.

The BatteryPlus35-II operates from 100 to 240V AC mains power supply, towing vehicle auxiliary and solar panels to provide 35A of current to simultaneously power caravan loads and charge the caravan battery.

The BatteryPlus35-II is available in a range of models to suit any RV and battery management need.

FEATURE	BP35-II-SI	BP35-II-SR	BP35-II-HA
In-built Solar	20A - PWM	30A - MPPT	30A - MPPT
Lithium (LiFePO4) Charging	No	No	Yes
Maximum AC Charging Current	20A	20A	30A

## OPTIONAL ADD-ONS

To get the most of your BatteryPlus35-II it may be used with the following products (sold separately) from the BM PRO range:

### BC300 + Commlink

External Shunt for integration of additional accessories and high current loads such as inverters.

### RVView Battery Monitor

To monitor battery parameters and charge sources.

### Trek Battery Monitor

To gain greater insights into battery usage, the ability to monitor water tank levels and control water pumps.

### Odyssey + OdysseyLink

To monitor battery usage and caravan features (tanks and temperature) and control caravan loads from an in-built monitor.

### MiniBoost

DC-to-DC charge-booster for RV applications.

## FREQUENTLY ASKED QUESTIONS

### I have fitted a battery to the BP35-II, but it's not detected by my BM PRO battery monitor?

Check the following:

- ☐ The battery connections are tight and not loose or corroded.
- ☐ The battery polarity is correct: red lead is positive, black lead is negative.
- ☐ The dealership fitted in-line fuse with the caravan battery is fitted and not blown. The correct value is 40A.

### I think one of my loads is not receiving power?

The load may be faulty, activating the protective electronic fuse and turning the load off. If this is the case, the Load Status Indicator LED will be flashing red and the System Status Indicator will be solid red.

Should you encounter any faulty loads, please contact your caravan dealership.

### None of my loads are powered except my battery monitor?

All loads minus the battery monitor will power down if you enter ECO Mode.

You will be put into ECO Mode if:

1. You have pressed the Battery icon on your battery monitor.
2. Battery voltage is low. The BP35-II will enter ECO Mode to conserve remaining battery voltage, which will disable power to caravan loads.  
Connect the BP35-II to a power source and begin battery charging.

### What size fuse should I use with the BatteryPlus35-II?

The AUX+, BRK+ and BATT+ outputs should all be fitted with a maximum 40A fuse.

### None of my loads are powered, including my battery monitor?

All loads, including any battery monitor will power down if you enter Storage Mode.

You will be put into Storage Mode if:

1. The switch connected to the BP35-II RSW input has been activated. This turns off power to all caravan loads and accessories connected to the BP35-II CAN bus. Check that the switch has not been activated.
2. Battery voltage is very low. The BP35-II will enter Storage Mode to conserve remaining battery voltage, which will disable power to all caravan loads and accessories connected to the BP35-II CAN bus. Connect the BP35-II to a power source and begin battery charging.

## SPECIFICATIONS

Input Voltage Range	110-240V AC $\pm$ 10%, 50-60Hz
Input Surge	<40A (cold start)
Output Current	35A (Load + Battery Current)
Factory Set Voltage	13.65V (Float Voltage)
Output Ripple Voltage	<150mV
Battery Current Limit	BP35-II-SI, BP35-II-SR: Max. 20A BP35-II-HA: Max. 30A
Low Voltage Disconnect	Lead-acid: 10.8V $\pm$ 0.2V LiFePO4: 12.0V $\pm$ 0.2V
Battery Connect After Low Voltage Disconnect	Lead-acid: 12.8V $\pm$ 0.2V LiFePO4: 13.8V $\pm$ 0.2V
Battery Drain	<15mA (when in Storage Mode)
AC/DC Efficiency	>83%
Cooling Fan	Thermally Controlled
Solar Output Current	BP35-II-SI: max. 20A BP35-II-SR, BP35-II-HA: 30A (nominal)
Solar Start Voltage	BP35-II-SI: >VBatt BP35-II-SR, BP35-II-HA: 17.5V
Solar Input Voltage (after start-up)	BP35-II-SI: >VBatt BP35-II-SR, BP35-II-HA: 15-25V
Ambient Temperature	0-50 °C
Communications	Communication bus available
Dimensions	327mm x 207mm x 82mm
Weight	2kg