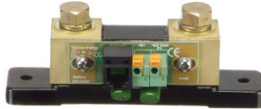




victron energy

B L U E P O W E R

Precision Battery Monitoring



BMV 600

Precision Battery Monitoring

Precision monitoring

The essential function of a battery monitor is to calculate ampere-hours consumed and the state of charge of a battery. Ampere-hours consumed is calculated by integrating the current flowing in or out of the battery. In case of a constant current, this integration is equivalent to current multiplied by time. A discharge current of 10A during 2 hours, for example, amounts to 20Ah consumed. All our battery monitors are based on a powerful microprocessor, programmed with the algorithms needed for precision monitoring.

Standard information and alarms

- Battery voltage (V).
- Battery charge/discharge current (A).
- Ampere-hours consumed (Ah).
- State of charge (%).
- Time to go at the current rate of discharge.
- Visual and audible alarm: over- and under voltage, and/or battery discharged.
- Programmable alarm or generator start relay.

BMV 600: low cost ultra high resolution monitor

- Highest resolution: 10mA (0,01A) with 500A shunt.
- Lowest current consumption: 4 mA @12V and 3mA @ 24V.
- Easiest to wire: the BMV 601 comes with shunt, 10 meter RJ 12 UTP cable and 2 meter battery cable with fuse; no other components needed.
- Easiest to install: separate front bezel for square or round appearance; ring for rear mounting and screws for front mounting.
- Broadest voltage range: 9 – 90 VDC without prescaler needed.

BMV 600H: 35 to 150VDC voltage range

No prescaler needed.

BMV 602: two batteries and communication port

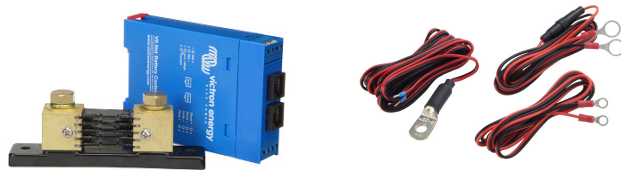
In addition to all the features of the BMV600, the BMV602 can measure the voltage of a second battery and has a communication port. (Isolated RS232 interface is needed to connect to a computer)

VE.Net Battery Controller: any number of batteries

- One VE.Net panel will connect to any number of battery controllers.
- Comes with 500A/50mV shunt and can be programmed for any other shunt.
- With use, abuse and data memory.
- Temperature sensor and connection kit included.

Learn more about batteries and battery charging

To learn more about batteries and charging batteries, please refer to our book 'Energy Unlimited'. (Available free of charge from Victron Energy and downloadable from www.victronenergy.com).



VE.Net Battery Controller





Specifications

| Battery Monitor | BMV 600 | BMV 600H | BMV 602 | VE.Net Battery Controller | VE.Net Battery Controller 48V |
|--|--|--------------|--------------------------|-----------------------------|-------------------------------|
| Power supply voltage range | 9 - 90 VDC | 35 - 150 VDC | 9 - 90 VDC | 9 - 35 VDC | 9 - 60 VDC |
| Current draw, back light off | 4 mA @ 12V 3 mA @ 24V | 3 mA | 4 mA @ 12V 3 mA @ 24V | 10 mA at 12V | 3mA at 48V |
| Input voltage range (V DC) | 9 - 90 VDC | 35 - 150 VDC | 9 - 90 VDC | 9 - 35 VDC | 39 - 60 VDC |
| Battery capacity (Ah) | 20 - 9999 Ah | | | 20 - 60000 Ah | |
| Operating temperature range | -20 +50°C (0 - 120°F) | | | | |
| Measures voltage of second battery | No | No | Yes | No | |
| Communication port | No | No | Yes | Yes (VE.Net) | |
| Potential free contacts | 60V/1A (N/O) | | | | |
| RESOLUTION (with 500 A shunt) | | | | | |
| Current | ± 0,01 A | | | ± 0,1 A | |
| Voltage | ± 0,01 V | | | | |
| Amp hours | ± 0,1 Ah | | | | |
| State of charge (0 - 100 %) | ± 0,1 % | | | | |
| Time to go | ± 1 min | | | | |
| Temperature (0 - 50 °C or 30 - 120 °F) | n. a. | | | ± 1°C (± 1°F) | |
| Accuracy of current measurement | ± 0,3 % | | | | |
| Accuracy of voltage measurement | ± 0,4 % | | | | |
| INSTALLATION AND DIMENSIONS | | | | | |
| Installation | Flush mount | | | DIN rail | |
| Front | 63 mm diameter | | | 22 X 75 mm (0.9 x 2.9 inch) | |
| Front bezel | 69 x 69 mm (2.7 x 2.7 inch) | | | n. a. | |
| Body diameter | 52mm (2.0 inch) | | | n. a. | |
| Body depth | 31mm (1.2 inch) | | | 105 mm (4,1 inch) | |
| ACCESSORIES | | | | | |
| Shunt (included) | 500 A / 50 mV | | | 500 A / 50 mV | |
| Cables (included) | 10 meter 6 core UTP with RJ12 connectors, and cable with fuse for '+' connection | | | Supplied with 1 m cables | |
| Temperature sensor | n. a. | | | Supplied with 3 m cable | |
| Computer interface | n. a. | n. a. | optional | n.a. | |