

The Latest Evolution in Battery Monitors!

The **BMV-712 SMART** Battery Monitor is part of a range of high-precision battery monitors. Its essential function is to calculate ampere hours consumed and the state of charge of a battery. Think of this monitor as your battery 'fuel gauge', with a time-to-go indicator and much more.

The **BMV-712** is the latest evolution in Victron's range of battery monitors. It has all the benefits of previous models with the added benefit of integrated **Victron Smart Technology**; which implements bluetooth allowing wireless communication between various products. With built-in bluetooth, the BMV Smart is ready for the Internet of Things (IoT) era.



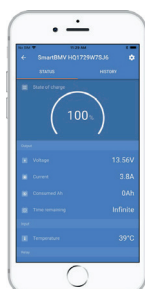
Part Number: T12001480

Features

- Measures battery voltage, current, power, ampere-hours consumed and state of charge
- Remaining time at the current rate of discharge
- Programmable visual and audible alarm
- Programmable relay, to turn off non-critical loads or to run a generator when needed
- 500 Amp quick-connect shunt and connection kit
- Shunt selection capability up to 10 000 Amps
- VE.Direct communication port
- Stores a wide range of historical events, which can be used to evaluate usage patterns and battery health
- Wide input voltage range: 6.5 – 70 V
- High-current measurement resolution: 10 mA (0.01 A)
- Additional input to measure voltage (of a second battery), temperature or midpoint voltage, and corresponding alarm and relay settings

Use a smartphone or other Bluetooth enabled device to:

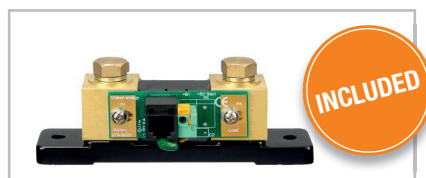
- Customise settings
- Monitor all important data on a single screen
- View historical data
- Update the software when new features become available



See the VictronConnect BMV app Discovery Sheet for more screenshots

Easy to install

All electrical connections are to the quick-connect PCB on the current shunt. The shunt connects to the monitor with a standard RJ12 telephone cable. Included: RJ12 cable (10 m) and battery cable with fuse (2 m); no other components needed. Also included are a separate front bezel for a square or round display appearance, a securing ring for rear mounting and screws for front mounting.



Midpoint voltage monitoring

One bad cell or one bad battery can destroy a large, expensive battery bank. When batteries are connected in series, a timely warning can be generated by measuring the midpoint voltage. Please see the BMV manual, section 5.2, for more information. We recommend the Battery Balancer (BMS012201000) to maximise service life of series-connected, lead-acid batteries.

Very low-current draw from the battery

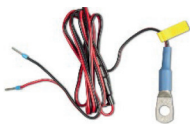
Current consumption: 0,7 Ah per month (1 mA) @12 V and 0,6 Ah per month (0,8 mA) @ 24 V, especially for Li-ion batteries that have virtually no capacity left when discharged until low-voltage shutdown. After shutdown, due to low-cell voltage, the capacity reserve of a Li-ion battery is approximately 1 Ah per 100 Ah battery capacity. The battery will be damaged if the remaining capacity reserve is drawn from the battery. A residual current of 10 mA for example may damage a 200 Ah battery if the system is left in discharged state for more than 8 days.

Bi-stable alarm relay

Prevents increased current draw in case of an alarm.

Specifications		Resolution & Accuracy (with a 500 A shunt)	
Supply voltage range	6.5 - 70 Vdc	Current	± 0.01 A
Current draw, back light off	< 1 mA	Voltage	± 0.01 V
Input voltage range	Auxiliary battery 6.5 - 70 V	Amp hours	± 0.1 Ah
Battery capacity (Ah)	1 - 9999 Ah	State of charge (0 - 100%)	± 0.1%
Operating temperature range	-40 °C to +50 °C (-40 - 120 °F)	Time to go	± 1 min
Temperature measurement range	-20 °C to +50 °C	Temperature (0 - 50 °C or 30 - 120 °F)	± 1 °C/°F
VE.Direct communication port	Yes	Accuracy of current measurement	± 0.4%
Bi-stable relay	60 V/1 A normally open (function can be inverted)	Accuracy of voltage measurement	± 0.3%
Standards		Installation & Dimensions	
Safety	EN 60335-1	Installation	Flush mount
Emission/Immunity	EN 55014-1/EN 55014-2	Front	63 mm diameter
Automotive	ECE R10-4/EN 50498	Front bezel	69 x 69 mm (2.7 x 2.7 inches)
		Body diameter and depth	52 mm (2.0 inch) and 31 mm (1.2 inches)
		Protection category	IP55 (not intended for outdoor use)

Optional Accessories



Temperature sensor



Venus GX

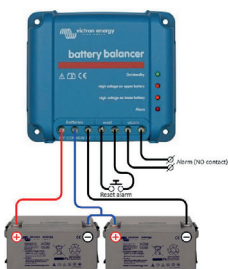
The Venus GX provides intuitive control and monitoring. It has the same functionality as the Colour Control GX, with a few extras:

- lower cost, mainly because it has no display or buttons
- 3 tank sender inputs
- 2 temperature inputs



Colour Control

The powerful Linux computer, hidden behind the colour display and buttons, collects data from all Victron equipment and shows it on the display. Besides communicating with Victron equipment, the Colour Control communicates through CAN bus (NMEA2000), Ethernet and USB. Data can be stored and analysed on the VRM Portal.



Battery Balancer (BMS012201000)

The Battery Balancer equalizes the state of charge of two series-connected 12 V batteries, or of several parallel strings of series-connected batteries.

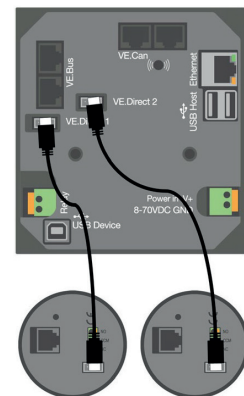
When the charge voltage of a 24 V battery system increases to more than 27 V, the Battery Balancer will turn on and compare the voltage over the two series-connected batteries. The Battery Balancer will draw a current of up to 1 A from the battery (or parallel-connected batteries) with the highest voltage. The resulting charge current differential will ensure that all batteries will converge to the same state of charge.

If needed, several balancers can be paralleled.

A 48 V battery bank can be balanced with three Battery Balancers.

Configuration

A maximum of four BMVs can be connected directly to a Colour Control GX. Even more BMVs can be connected to a USB Hub for central monitoring.



This may not be a stock item. Please speak to our sales representative about lead times. Lead times, price and availability can only be determined on receipt of an official quote from our supplier. This can sometimes take up to 3 days.

South Africa, Gauteng, Jet Park - Head Office:

KwaZulu Natal:

T: +27 (0)31 303 4129

Northern Cape:

T: +27 (0)53 723 3415

North West:

T: +27 (0)14 596 5257

Mpumalanga:

T: +27 (0)13 692 8132

Western Cape:

T: +27 (0)21 945 1453

Eastern Cape:

T: +27 (0)81 036 9111

T: +27 (0)11 823 5650

Free State:

T: +27 (0)63 257 0505

Botswana, Gaborone:

T: +267 399 4150

Botswana, Jwaneng:

T: +267 588 7617

Botswana, Letlhakane:

T: +267 297 8568

Mozambique, Tete:

T: +258 252 20666

Zambia, Kitwe:

T: +26 (0)21 222 5338

trading@trysome.co.za • www.trysome.co.za • PO Box 13677, Witfield 1467

Call us today!


TRYSOME
 AUTO-ELECTRICAL ENGINEERING