

The BMV (Battery Monitor Victron) Selection Guide

The BMV range consists of products with BMV-7 in the model name; earlier versions had a 6 prefix.

Below are highlighted the significant differences between the various models – so you can be sure you choose the right one for your application and budget. The range consists of:

- **BMV-712 Smart** – 6.5 - 95 V Input, 1 - 9999 Ah Battery Capacity, Bluetooth Built-In, Auxiliary Input*

The models below, without Bluetooth Built-In, are collectively referred to as the BMV-700 series:

- **BMV-700** (6.5 – 95 V input, 1 – 9999 Ah Battery Capacity)
- **BMV-700H** (60 – 385 V High Voltage Input, 1 – 9999 Ah Battery Capacity)
- **BMV-702** (6.5 – 95 V Input, 1 – 9999 Ah Battery Capacity, Auxiliary Input*)
- **BMV-702 [Black Display Face]** (6.5 – 95 V Input, 1 – 9999 Ah Battery Capacity, Auxiliary Input*)

* Can be programmed to measure the voltage (of a second battery), or battery temperature (using the Victron Temperature Sensor), or midpoint voltage.

The BMV range is a group of precision battery monitors. Their essential function is to calculate ampere hours consumed and the state of charge of a battery. Think of these monitors as your battery ‘fuel gauge’, with a time-to-go indicator and many additional features.

Each model comes with a square bezel overlay (if you wish a square gauge look as opposed to round), a securing ring for rear mounting, and screws for front mounting.

Any model can be mounted in a panel of your choice with a 52mm (2.0 inch) aperture or in one of Victron’s optional wall enclosures.

A 500A/50mV shunt, fitted with a quick connect printed circuit board is part of every product package. Alternative shunts are available if required: 1000A-50mV, 2000A-50mV, and 6000A-50mV.

All models come with 10m (33 ft) of 6 core UTP cable with RJ12 connectors and a 2 m (7 ft) power supply cable complete with fuse.

All the BMV monitors are all compatible with VE.Smart Networking – a wireless network which allows a number of Victron products to exchange information. It is a wireless technology using Bluetooth Smart. (For example, VE.Smart can be used to add remote voltage and temperature sensing to your Victron MPPT Solar Chargers. Simply connect either a BMV battery monitor or a Smart Battery Sense to a Solar Charger and the Solar Charger will then receive battery voltage and temperature information, and use that data to optimize its charge parameters. This will improve battery charging efficiency and prolong battery life.) Note that although the BMV-702, BMV-702 (Black), BMV-700 and BMV-700H do not have Smart Technology built-in, they can all be updated to use it with the optional [VE.Direct to Bluetooth Smart dongle](#). The only downside is that means the VE.Direct communication port is now in use for the dongle, so you cannot connect it to a [Victron GX device](#) as well.

If you want Victron Smart Technology and GX device connectivity, then buy the BMV-712 Smart. If you don’t need the added functionality of the 712 Smart or are on a budget, then choose one of the other models to suit your needs.