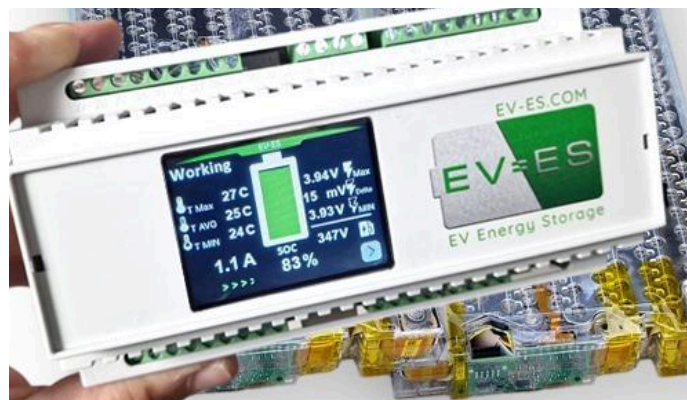


BATTERY MONITOR

EV-ES

A specialized monitoring device designed to track the parameters of electrical modules and complete battery systems across a broad spectrum of electric vehicle manufacturers.



Electric batteries, comprising modules equipped with factory-standard CMUs (Cell Monitoring Units), interface with the **Battery Monitor** using a communication protocol like CAN. This setup allows the transmission of key module parameters - cell voltages, temperature, and cell balancing. The **Battery Monitor** then aggregates, validates these data, and clearly displays them to the user, ensuring precise and comprehensible monitoring.

The device features a standard 2.4" touchscreen seamlessly integrated into its housing. There's an option to upgrade to a larger 7" touchscreen for enhanced interaction. It offers WiFi connectivity for browser-based remote operation. In environments without WiFi, the device can create its own Access Point (AP) for direct connections. Additionally, it supports communication with computers via USB-C cable, providing versatile connectivity options.

Connecting the device to the internet enables users to receive remote software updates, bringing new functionalities and enhancing compatibility with various battery, inverter, and current meter manufacturers. This project is committed to continuous development, ensuring regular and systematic updates.

*The **Battery Monitor** has been equipped with additional electronic circuits (including MOSFETs), which can be used to control external contactors. These circuits work in tandem with the device's programmed logic to ensure both the*



safety and operational parameters of the device are meticulously maintained. Furthermore, the device offers the capability to connect external sensors, such as smoke, fire, or tamper detection. These sensors trigger an immediate halt to battery operation, initiating an emergency mode.

The device offers compatibility with a variety of current meters that provide real-time current consumption readings. Furthermore, it enables communication between the **Battery Monitor** and the inverter, allowing for tasks like reducing the charging current during the final stages of battery charging. In certain cases, specific inverters may necessitate an additional component known as the **CAN Bridge**.

Supported battery/modules: **Tesla, BMW, Mitsubishi, VW, KIA, Hyundai.**
 Supported current sensors: **Victron, LemCAB300/500, IsaScale, analog.**
 Supported inverter manufacturers: **Victron, Sofar HYD, SolaX Power.**

Battery Monitor technical details:

Description	Unit	Value
Gross weight	kg	0,250
Height / width / depth	mm	85 / 155 / 60
Enclosure type		DIN rail, 9 modules
Supply voltage	V	12
Maximum current draw.	A	3
Nominal power draw	W	5
Minimal power draw (sleep mode)	W	2
Operating temperature	°C	0 - 50
Operating humidity	%	0 - 85
Display		2.4" / 7", touchscreen
Designated work environment		Indoor
Cooling method		Passive

