SMART BATTERY MONITOR

BM19
USUER GUIDE

Thank You
FOR CHOOSING

Please read through the manual in detail before installing and using your new battery monitor. Should you have any questions concerning safety precautions, installation, or use please contact us using the contact details below.

BLUETOOTH COMPATIBLE

Product Introduction:
The BM19 Smart Battery Monitor is a high-precision meter that allows you to check the status of your battery via your smartphone with Smart Battery Monitor app. Through the use of the current shunt, the battery monitor measures the discharge or recharge currents and calculates the Ampere-hours (Ah) going in and out of the battery. High-precision voltage measurements are taken and displayed in real-time through the use of a field-installed sense wire.
The BM19 monitor is compatible with all types of batteries including Lithium-ion, lead-acid and nickel-metal hydride batteries.

Applications:
Suitable for traction/mobile and stationary applications.
- Golf Carts & Utility Vehicles
- Marine RVs
- Solar Energy Storage
- Aerial Work Platforms
- Robots

Data Displayed:
- Battery Voltage
- Battery Current
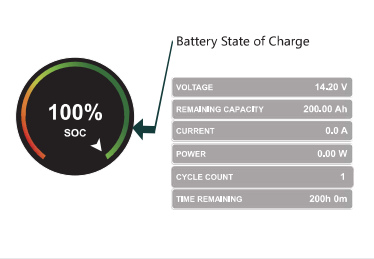- Battery State of Charge (SOC)
- Total Ampere-hours

COULOMETER BATTERY MONITOR

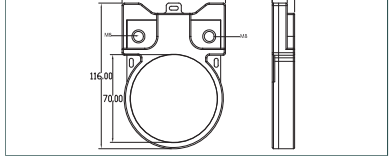| Parameter	Min	Max	Unit
Voltage	8.0	80.0	V
Current	0.0	500.0	A
Capacity	0.1	999.0	Ah
Temperature	0.0	35.0	°C
Active Parasitic Current		14.0	mA
Standby Parasitic Current		0.8	mA
Sleep Parasitic Current		80.0	uA
Voltage Accuracy	±1		%
Current Accuracy	±1		%
Capacity Accuracy	±1		%

Battery Information Display via Phone:

Figure 1

Battery State of Charge

100% SOC

VOLTAGE	14.20 V
REMAINING CAPACITY	200.00 Ah
CURRENT	0.0 A
POWER	0.00 W
CYCLE COUNT	1
TIME REMAINING	200h 0m

COULOMETER BATTERY MONITOR

Dimensions:

Figure 2

Smart Shunt Installation:
1. As shown in Terminal Mount Install the M8X30mm brass of the shunt's B- side in reverse, and attach the shunt's B- side directly to the battery's negative terminal.
2. As shown in Wall Mount The Smart shunt has two 3.0mm holes for mounting purposes located in the base of the shunt holder. The holes can be used to screw or bolt it onto a hard surface(screws are not included).

Terminal Mount

Wall Mount

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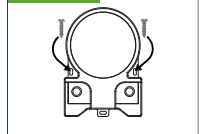
COULOMETER BATTERY MONITOR

Electrical Connections:
NOTE: Given the multitude of different applications for which this monitor can be used, the correct gauge of wire to be used is not specified. If you are unsure of the correct gauge for your setup, please consult a qualified automotive electrician or contact EJ technical support for advice.

As shown in figure 3:

* Connect "1" to the battery negative terminal using a suitable length M8 bolt to secure the smart battery monitor.
* Use the bolts provided for your convinience or any standard M8 bolt of the desired length.
* Connect all negative connections to "2" on the Smart battery monitor.
* Connect the positive flying lead "3" to the battery positive terminal, along with all positive connections.

Figure 3

Connection diagram of 500A shunt

B+
Battery
B-

P+ (output +)
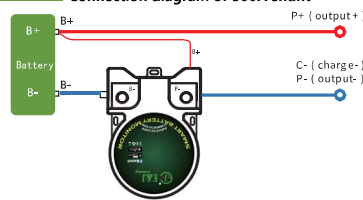
C- (charge -)
P- (output -)

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Figure 3
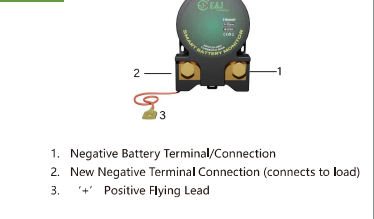
1. Negative Battery Terminal/Connection
2. New Negative Terminal Connection (connects to load)
3. '+' Positive Flying Lead

Preparation Steps:
Fully charge the battery bank such that it reaches 100% SOC. Failure to take this step will lead to erroneous SOC readings.

Connecting To The Smart Battery Monitor APP:
1. Installl the Smart Battery Monitor app via Google or the Apple App store. You can search for "Smart Battery Monitor" or use the provided QR codes.

2. Open the app and select the Battery Monitor by its serial number.

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3. At the "BASIC SETTINGS" screen, enter the battery parameter information required followed by tapping 'SAVE SETTING'.
   -Fully charge the battery bank and set the capacity remaing.
4. same as the reted capacity of battery.
   Tap the setting button on the top right, into the 'CALIBRATION' screen, enter the battery parameter information required, followed by tapping 'SAVE SETTING' at the bottom.
   -Ensure that the battery voltage is displayed correctly. Using a multi meter to check battery and set the same voltage on the App.
5. You will now be in the dashboard where you can monitor the battery's state of charge, voltage, current, time remaining and the cycle life.
6. Your smart battery monitor is now ready to use.

Technical Support: If you have technical questions about your Battery Monitor, please contact the original place of purchase or EJ directly.

Warranty: One-year limited warranty.