

File Name	ME12100BT Product Specification	File No.	SP141226	Page	1/5
-----------	---------------------------------	----------	----------	------	-----

1. Scope

This specification is for the 12V 100Ah Muller Energy Sodium Starter Battery, in which the description and model, main performance and precautions of the product are included.

This product is well suited for the use in 4WD, caravans, camper vans and boats.

2. Description and Model

2.1 Description : Sodium Starter Battery

2.2 Model : ME12100BT

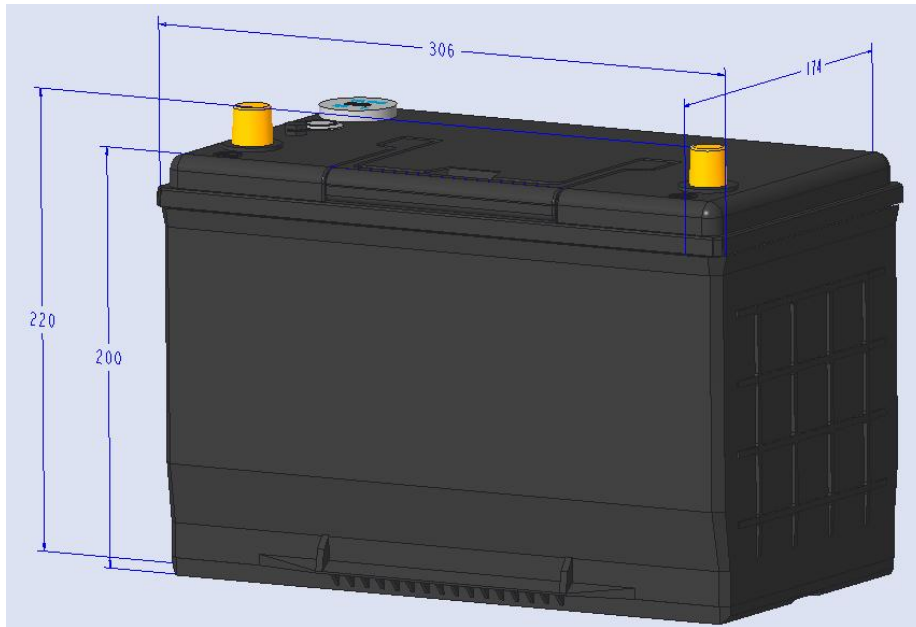
3. Appearance



File Name	ME12100BT Product Specification		File No.	SP141226	Page	2/5
4. General Technical Parameter						
#	Item		Parameter	Remark		
1	Nominal Capacity		100.0 Ah @ 0.2C discharge			
2	Minimum Capacity		100.0 Ah @ 0.2C discharge			
3	Nominal Voltage		12V			
4	AC Impedance Resistance		≤50mΩ			
5	Charge	Max Charge Current	100A			
		Cut-off Voltage	15.8V			
		Charging temperature	-20℃~70℃			
6	Discharge	Max Continuous Current	200A			
		Max Instantaneous Current	400A			
		CCA	1300A			
		Cut-off Voltage	8V			
		Discharging temperature	-40℃~70℃			
7	Expected Cycle Life		1500 cycles 2C@100%DOD 4000 cycles 0.5C@100%DOD			
8	Storage	Temperature	25±5℃			
		Humidity	65%±20%RH			
9	Self discharge		≤3%/Month			
10	Weight		13.4kg			
11	Battery dimensions	Length	306±2mm			
		Width	174±2mm			
		Height	200±2mm(220±2mm including terminals)			
12	Emergency button		When the battery is discharged to 10V undervoltage protection, press and hold the emergency button for 3 seconds, and the battery will continue to discharge for another 180 seconds;			
13	Display		Touch the switch turn on/off display screen			
14	Bluetooth function		Android and iPhone apps available. Please download the App. QR code below. Please do not change any settings in the BMS unless entirely sure of the consequences.			

File Name	ME12100BT Product Specification	File No.	SP141226	Page	3/5
-----------	---------------------------------	----------	----------	------	-----

5. Battery Drawings



6. Transportation

For shipping, the battery for shipping should be packed in a padded box with an SOC of around 50%

Excessive vibration, impact, sun and rain should be avoided during shipping.

The battery is suitable for cars, trains, ships, aircraft and other transportation vehicles. Transport requirements need to be followed.

7. Storage and other matters

7.1 Long-term storage

Batteries should be stored (more than 3 month) indoor with a dry and clean environment at 25°C~35°C. Avoiding contact with corrosive substances and keep away from fire and heat source.

The battery should be charged and discharged every 6 months.

File Name	ME12100BT Product Specification	File No.	SP141226	Page	4/5
-----------	---------------------------------	----------	----------	------	-----

8. Handling of Batteries

8.1 Charging

8.1.1 Charging current

Charging current shall not exceed the maximum charging current in this specification. Otherwise, it may cause problems in charge and discharge performance, mechanical performance and safety performance, and may cause heat or leakage.

8.1.2 Charging voltage

Charging voltage shall not exceed the maximum charging current in this specification. Charging temperature

Batteries must be charged within the ambient temperature range of $-20^{\circ}\text{C}\sim 70^{\circ}\text{C}$.

8.1.3 Forbidding reverse charge

Battery should be connected correctly. It is strictly prohibited to reverse charge. Otherwise, it will likely cause the battery to fail.

8.2 Discharge

8.2.1 Discharging current

Discharge current shall not exceed the maximum charging current in this specification; Otherwise, it may cause dramatic capacity loss and overheating.

8.2.2 Discharge temperature

Batteries must be discharge within the ambient temperature range of $-40^{\circ}\text{C}\sim 70^{\circ}\text{C}$.

8.3 Battery Handling Precautions

8.3.1 Before using the battery, please read the specification and pay attention to the information on the battery sticker.

8.3.2 Please use the battery in a normal indoor environment, temperature: $25^{\circ}\text{C}\sim 35^{\circ}\text{C}$, relative humidity: 15 ~ 90%, atmospheric pressure: 86~106 kPa.

8.3.3 Keep away from heat, fire, children. Do not beat, drop or impact the battery.

8.3.4 The battery can only use an appropriate charger to charge.

8.3.5 Do not short circuit the battery at any time, otherwise it can cause serious damage to the battery and cause dangerous situations.

8.3.6 If the battery not used for an extended period of time, please store the battery as outlined in this document.

8.3.7 Please recycle battery at end of life.

File Name	ME12100BT Product Specification	File No.	SP141226	Page	5/5
9. Bluetooth APP App supports Apple and Android devices. As the BMS is in a metal box, Bluetooth range may be limited. Please download Bluetooth APP for iPhone or Android phones by scanning the QR codes below. Should you not be able to connect, please ensure Bluetooth is enabled and restart your device. 10. Precautions Failure to observe the following precautions may result in battery leakage, overheating, explosion and/ or fire. Warning! 1. Do not immerse the battery in water or allow it to get wet. 2. Do not strike, throw or subject the battery near a fire or in hot conditions. 3. Charge with specified charge according to charging requirement 4. Do not reverse the positive (+) and negative (-) terminals. 5. Do not put the battery into a fire or apply direct heat to it. 6. Do not short-circuit the battery by connecting wires or other metal objects to the positive (+) and negative (-) terminals. Caution! a) Do not use or store the battery where is exposed to extremely hot temperatures, such as in a dark car parked in direct sunlight on a hot day. Otherwise, the battery may overheat. This can also reduce battery performance and/or shorten service life. b) Do not use battery in the strong electrostatic and magnetic field c) If the battery leaks and electrolyte gets into your eyes, rinse the eyes with clean running water and seek medical attention immediately. d) Do not use the battery if it gives off an odour, generates heat, changes color or have any problems during usage, storage and discharging.					