3. Electrical Specification

(Unless there is special requirement, the test shall be done under temperature of 25±2℃ and with relative humidity of 45~85%.)

<table>
<tr><th>Items</th><th>Test Condition</th><th>Standard</th></tr>
<tr><td>3.1
Standard
Charge</td><td>The standard charge means charge the battery in temperature below 25±3℃with initial charge current of 10A(50Ah)/ 20A(105h)/ 50A(230Ah)/ 60A(300Ah) and with constant voltage of 56.8V, then charge with constant voltage of 56.8V and with floating current taper to 1A(50Ah)/ 1A(105Ah)/ 2A(230Ah)/ 2A(300Ah) cut-off (Charger should be exclusively designed for lithium battery, with an accuracy of ±0.05V) within 6 hours.</td><td>/</td></tr>
<tr><td>3.2
Standard
Discharge</td><td>After battery is charged fully in accordance with the standard and then discharge to voltage 43.2V with discharge current of 10A(50Ah)/ 20A(105h)/ 50A(230Ah)/ 60A(300Ah) .The minimum gap time between charge and discharge period is 30 minutes.</td><td>Minimum Capacity ≥50/105/230/ 300Ah</td></tr>
<tr><td>3.3
Cycle Life</td><td>After the completion of standard charge and 30 minutes' rest, discharge with 80% DOD with constant current of 0.2C in the (25±3℃) environment, after 4000 cycles, rest it for 1 day and test the capacity in accordance with the above 3.2</td><td>Capacity≥80% Minimum Capacity</td></tr>
<tr><td>3.4
Discharge
Character</td><td><table><tr><td>Discharge current</td><td colspan="4">Discharge Temperature</td></tr><tr><td>0.2C</td><td>-10℃</td><td>0℃</td><td>25℃</td><td>40℃</td></tr></table>Batteries shall be charged according to 3.1 and discharged in accordance with the above mentioned temperature. The discharge capacity shall meet the standard. Batteries shall be stored for 6~8 hours at the test temperature</td><td>At -10℃: Discharge Capacity≥50%

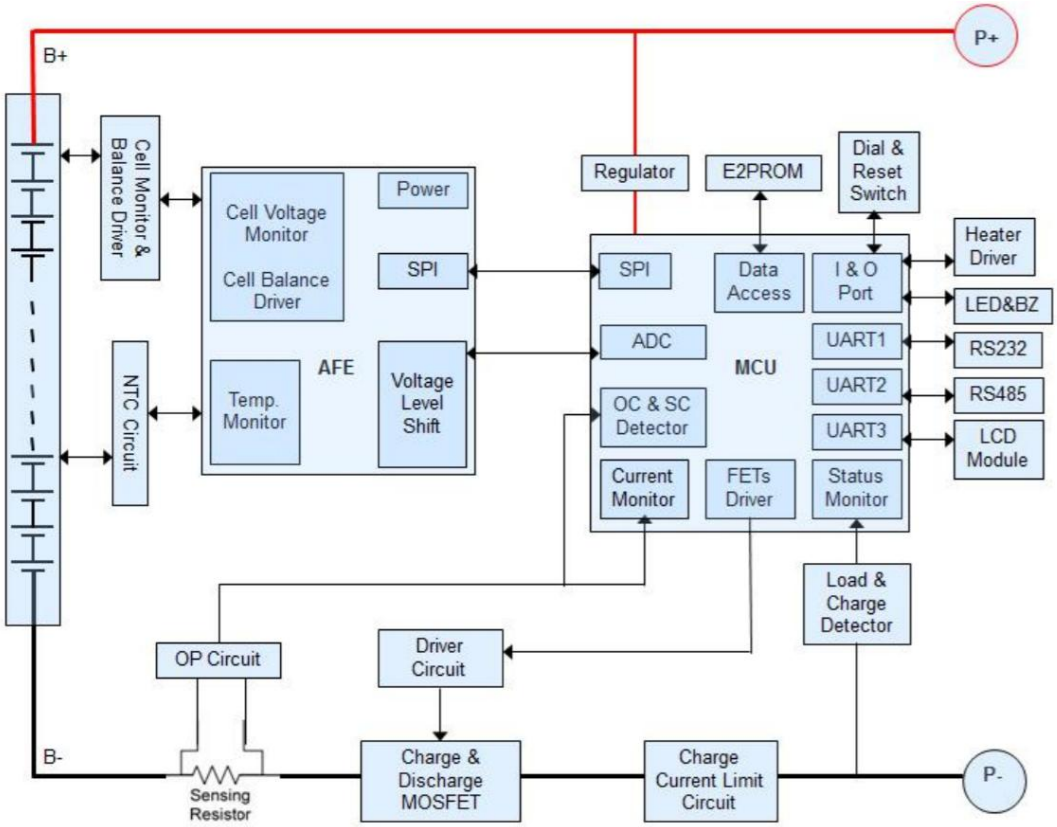
At 0℃: Discharge capacity≥80%

At 25℃ Discharge capacity≥100%

At 40℃ Discharge capacity≥100%</td></tr>
</table>

4. BMS

4.1 BMS System Schematic Diagram



4.2 BMS Parameter

No.	Item		51.2V 50Ah	51.2V 105Ah	51.2V 230Ah	51.2V 300Ah
1	Power Consumption	Low power consumption mode	≤100μA	≤100μA	≤100μA	≤100μA
2	Over charge Protection	Over charge detection voltage	3.65V	3.65V	3.65V	3.65V
		Over charge release voltage	3.5V	3.5V	3.5V	3.5V
3	Over discharge protection	Over discharge detection voltage	2.7V	2.7V	2.7V	2.7V
		Over discharge release voltage	2.9V	2.9V	2.9V	2.9V
4	Over current protection	Charging over current detection current (detection time)	50A (1S)	100A (1S)	200A (1S)	200A (1S)
		Discharging over current detection current 1 (detection time)	50A 1S	100A 1S	200A 1S	200A 1S
		Discharging over current detection current 2 (detection time)	≥75A 100ms	≥100A 100ms	≥200A 100ms	≥200A 100ms
5	Temp. Protection	Detection temperature	65±2℃	65±2℃	65±2℃	65±2℃
6	Balance	Balance voltage	3.5V	3.5V	3.5V	3.5V