



AYAA TECHNOLOGY CO.,LTD
BMS Specifications

Model: AY-LS20S110A-H165 (16S-20S)

Test item (Test at normal temperature 25±2°C)		Criterion		
Battery type classification		LF	LI	Adjustable
Communication Interface		RS485/CAN		YES
Voltage	Charging voltage	DC: 51.2V~64V CC/CV (3.2V/Cell) 16s~20s	DC: 67.2V~84V CC/CV (4.2V/Cell) 16s~20s	YES
Supply Current	Maximal continuous charging current	110A		YES
	Maximal continuous discharging current	110A		YES
	Current consume in normal operation	≤20mA		/
	Current consume in sleep operation	≤100uA		/
Balanced	Balance voltage for single cell	3.6±0.05V	4.2±0.05V	YES
	Balance current for single cell	36±10mA	42±10mA	YES
	Turn on the pressure difference	50mV		YES
Over-Charge Protection (single cell)	Over charge detection voltage	3.65±0.05V	4.25±0.05V	YES
	Over charge detection delay time	1.0S		YES
	Over charge release voltage	3.55±0.05V	4.15±0.05V	YES
Over-Discharge Protection (single cell)	Over discharge detection voltage	2.5±0.05V	2.7±0.05V	YES
	Over discharge detection delay time	1.0S		YES
	Over discharge release voltage	2.8±0.05V	3.0±0.05V	YES
Charge Over Current Protection	Charge Over current detection current	130±3A		YES
	Detection delay time	1.0S		YES
	Release conditions	Removing the charger release		/
Discharge Over Current Protection	Discharge Over current detection current 1	250±3A		YES
	Detection delay time	10.0S		YES
	Discharge Over current detection current 2	350±3A		YES
	Detection delay time	1.0S		YES
Short Protection	Release conditions	Removing the load is lifted		/
	Detection condition	Battery B + Short Circuit for P- Connection Head		/
	Detection delay time	200-600uS		YES
	Release condition	Remove load		/
SOC	accuracy(It takes a charge-discharge cycle to achieve the accuracy requirement after initial power-on.)	5%~8%		/
Temperature	Low temperature protection when charge	0°C		YES
	Release temperature(low temperature protection)	5°C		YES
	Over temperature protection when charge	60°C		YES
	Release temperature(over temperature protection)	55°C		YES
	Low temperature protection when discharge	-15°C		YES
	Release temperature(low temperature protection)	-10°C		YES
	Over temperature protection when discharge	65°C		YES
	Release temperature(over temperature protection)	55°C		YES
	Operating Temperature Range	-40~+85°C		/
	Storage Temperature Range	-40~+125°C		/
SIZE: L165 * W100 * T17 mm				
NTC:10K NTC	Heater: /	Braking Resistors: /	Equalization Method: Passive	
Temperature switch: / °C (the batteries temperature)	Weak current switch: YES		Activation Method: /	
Optional configuration: LCD display screen: YES	LED light board: /	Bluetooth mode: /	4G: /	GPS: /



Prepared: Zhang 2024-11-27

Checked:

Approved: