

# Smart BMS Specifications

Description	Description	Specifications												Units
		15A	20A	30A	40A	50A	60A	80A	100A	120A	150A	200A	250A	
Discharge	Continuous discharge current	15A	20A	30A	40A	50A	60A	80A	100A	120A	150A	200A	250A	A
	Over-discharge current detection voltage	50±50	60±10	100±20	120±20	150±30	180±30	250±50	300±50	400±100	500±100	600±100	600±100	A
Inner Resistance	Main Circuit Conduct Inner-resistance	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	mΩ
Charge	Charge voltage	(LiFePO4): (Battery count)*3.65				(Li-ion): (Batterycount)*4.2				(LTO): (Battery count)*2.8				V
	Charge current	8	10	15	20	25	30	40	50	60	75	100	125	A
	Over-Charge current detection delay	25±1	30±2	50±3	60±4	75±5	90±6	125±7	150±10	200±12	250±15	300±20	300±25	A
Over charge-protection	Over-charge detection voltage	(LiFePO4): 3.75±0.05				(Li-ion): 4.25±0.05				(LTO): 2.85±0.05				V
	Over-charge protection delay	1												s
	Over-charge release voltage	(LiFePO4): 3.55±0.05				(Li-ion): 4.15±0.05				(LTO): 2.75±0.05				V
Balance	Balance detect Voltage	(LiFePO4): 3.2				(Li-ion): 3.8				(LTO): 2.4				V
	Balance release voltage	(LiFePO4): 3.2				(Li-ion): 3.8				(LTO): 2.4				V
	Balance current	(LiFePO4): 30±5				(Li-ion): 30±5				(LTO): 20±5				mA
Over-discharge protection	Over-discharge detection voltage	(LiFePO4): 2.2±0.05				(Li-ion): 2.7±0.05				(LTO): 1.7±0.05				V
	Over-discharge detection delay	1												S
	Over-discharge release voltage	(LiFePO4): 2.3±0.05				(Li-ion): 2.8±0.05				(LTO): 1.8±0.05				V
Over-Charge current protection	Over-discharge current detection delay	1												s
	Over-discharge current protection release condition	Off load												
Short Circuit protection	Short Circuit protection condition	Short Circuit of External Load												
	Short circuit detection delay	250												uS
	Short circuit protection release	Off load												
Temperature Protection	Temperature protection range	(LiFePO4): Charge: -40~65; Discharge: -40~70				(Li-ion): Charge: -40~65; Discharge: -40~70				(LTO): Charge: -40~65; Discharge: -40~70				°C
Self-Consumption	Working current	100												uA
	Sleeping current (over-discharge)	20												uA
Working Temperature	Temperature range	-20~70												°C
Storing Temperature	Temperature range	-40~80												°C