

## Young Power Technology Limited

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### 13s 48v 40A smart BMS

No.	Item		standard			unit
			min	Normal	Max	
1	Voltage	voltage range	35.1		55.25	V
2	Current	continue charge current		40		A
		continue discharge current		40		A
3	Charging protection	Charger voltage(CC-CV)	54.6			V
		Overcharge protection voltage	4.2	4.25	4.3	V
		Overcharge protection delay time	1000	2000	3000	mS
		Overcharge protection recovery voltage	4.1	4.15	4.2	V
4	Discharge protection	Over-discharge protection voltage	2.6	2.7	2.8	v
		Over-discharge protection delay time	1000	2000	3000	mS
		Over-discharge protection recovery voltage	2.9	3	3.1	V
5	Overcurrent protection	Charging overcurrent protection value	45	50	55	A
		Charging overcurrent delay	1	3	5	S
		Charging overcurrent release recovery condition	delay 32s			
		Discharge overcurrent 1 protection current value	45	50	55	A
		Discharge overcurrent 1 protection delay	1	3	5	S
		Discharge overcurrent 2 protection current value	110	124	140	A
		Discharge overcurrent 2 protection delay	100		500	mS
		Discharge overcurrent protection recovery condition	delay 32s			
6	Short circuit protection	Short circuit protection delay time	200		500	Us
		Short circuit protection recovery	charge recovery			
7	Balance protection	Balanced turn-on voltage	3.95	4	4.05	V
		Balanced opening pressure difference		30		Mv
		balance mode	charge balance			
		balance current	40		60	Ma
8	Temperature protection	Charging high temperature protection value	63	65	67	℃
		Charging high temperature protection release value	53	55	57	℃
		Charging low temperature protection value	-7	-5	-3	℃
		Charging low temperature protection release value	-2	0	-2	℃
		Discharge high temperature protection value	73	75	77	℃

		Discharge high temperature protection release value	63	65	67	℃
		Discharge low temperature protection value	-12	-10	-8	℃
		Discharge low temperature protection release value	-2	0	2	℃
9	Internal resistance	Discharge loop internal resistance	/	5	10	mR
10	Self-consumption	Operating mode			20	mA
		Sleep mode			200	Ua
		Sleep condition and delay	Delay 10S without current/communication/protection status			
11	Operating temperature	Normal working range	-20		70	℃
12	storage temperature	Humidity below 90%	-40		85	℃
13	size	Length x width x height	140*62*16			mm