# MIBMS-3S20A-LFP-01

Battery Management System (BMS)



## **BMS for 9.6V LiFePO4 Battery Pack**

### **SPECIFICATIONS**

Protection IC BQ40Z50-R1. Please consult with an MI engineer for programming options.

No.	Test Item *Test at normal temperature 25±2°C and relative humidity ≤90%.			Criterion	
1	Voltage	Charging voltage		DC: 10.8V CC/CV	
2	Current	Current Consumption (Software)		<336µA	
		Current Consumption (Sleep Mode)		<75µA	
		Maximal Continuous Charging Current		<6A	
		Maximal Continuous Discharging Current		<18A	
3	Over Current Protection	OCC1 Threshold	6000mA	OCD1 Threshold	18000mA
		OCC1 Delay	2s	OCD1 Delay	2s
		OCC2 Threshold	8000mA	OCD2 Threshold	20000mA
		OCC2 Delay	2s	OCD2 Delay	2s
4	Over Charge Protection	COV Threshold Low Temp	12.3V±0.15V	COV Recovery Low Temp	12.0V±0.15V
		COV Threshold Std Temp	12.3V±0.15V	COV Recovery Std Temp	12.0V±0.15V
		COV Threshold High Temp	12.3V±0.15V	COV Recovery High Temp	12.0V±0.15V
		COV Threshold Rec Temp	12.3V±0.15V	COV Recovery Rec Temp	12.0V±0.15V
		COV Delay	2s		
5	Over Discharge Protection	CUV Threshold	6.0V±0.15V	CUVC Threshold	6.0V±0.15V
		CUV Delay	2s	CUVC Delay	2s
		CUV Recovery	6.6V±0.15V	CUVC Recovery	6.6V±0.15V
6	Over Temperature Protection	OTC Threshold	+70°C±3°C	UTC Threshold	0°C±3°C
		OTC Delay	2s	UTC Delay	2s
		OTC Recovery	+55°C±3°C	UTC Recovery	5°C±3°C
		OTD Threshold	+80°C±3°C	UTD Threshold	-20°C±3°C
		OTD Delay	2s	UTD Delay	2s
		OTD Recovery	+55°C±3°C	UTD Recovery	5°C±3°C
		OTF Threshold	+85°C±3°C		
		OTF Delay	2s		
		OTF Recovery	+65°C±3°C		
7	Secondary Protection	Cell		4.75V±0.1V	
8	Short Protection	Detection Condition		P+, P- Short Circuit	
		Detection Delay Time		200-500μs	
		Release Condition		Cut Load	
9	Resistance	Protection Circuitry		≤10mΩ	
10	Temperature	Operating Temperature Range		-30°C~+85°C	
		Storage Temperature Range		-40°C~+125°C	
11	Dimensions	L 80.0mm x W 70.0mm x T 4.2mm			



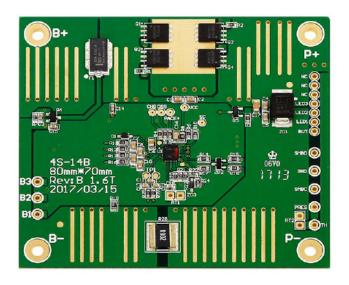
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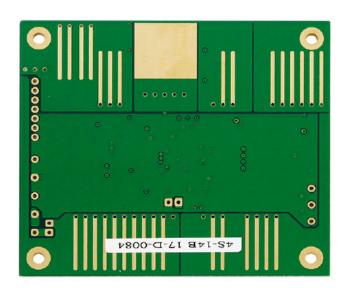
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## **BMS for 9.6V LiFePO4 Battery Pack**

**IMAGE** 





#### **CONNECTION DIAGRAM**

