



## PCM for 12.8V LiFePO4 Battery Pack

### SPECIFICATIONS

**No. Test Item** \*Test at normal temperature 25±2°C and relative humidity ≤90%.

### Criterion

No.	Test Item	Criterion
1	<b>Voltage</b>	Charging voltage DC: 14.8V CC/CV (3.7V/1cell)
2	<b>Current</b>	Maximal Continuous Charging Current <15A
		Maximal Continuous Discharging Current <30A
3	<b>Over Current Protection</b>	OC Charge Detection 15000mA OC Discharge Detection 30000mA
		OC Charge Delay 2s OC Discharge Delay 2s
		OC Charge Release 200mA OC Discharge Release 200mA
4	<b>Over Charge Protection</b> (POV: Protection Over Voltage)	POV 1st Level Detection 3.7V±0.025V/cell POV 2nd level Detection 3.95V±0.025V/cell
		POV 1st Level Release 3.4V±0.025V/cell POV 2nd level Release 3.825V±0.025V/cell
		POV 1st Level Delay 2s POV 2nd level Delay 5s
5	<b>Over Discharge Protection</b> (PUV: Protection Under Voltage)	PUV Detection 2.5V±0.05V/cell
		PUV Release 2.8V±0.05V/cell
		PUV Delay 2s
6	<b>Temperature Protection</b> (OT: Over Temperature) (UT: Under Temperature) (C: Charge / D: Discharge)	OTC Detection 50°C UTC Detection 0°C
		OTC Release 45°C UTC Release 5°C
		OTC Delay 2s UTC Delay 2s
		OTD Detection 60°C UTD Detection -20°C
		OTD Release 55°C UTD Release -10°C
		OTD Delay 2s UTD Delay 2s
7	<b>Over Load Protection</b> (D: Discharge)	OLD Detection 44.4A
		OLD Delay 31ms
		OLD Release 20s
8	<b>Short Protection</b> (SC: Short Circuit) (C: Charge / D: Discharge)	SCC Detection 88A SCD 1st Level Detection 88A
		SCC Delay 366µs SCD 1st Level Delay 366µs
		SCC Release 30s SCD 1st Level Release 120s
		SCD 2nd Level Detection 100A
		SCD 2nd Level Delay 214µs
		SCD 2nd Level Release 120s
9	<b>Resistance</b>	R sense 12mΩ (typ.)
10	<b>Protection IC</b>	BQ40Z50 & S-8244AAUFM Please contact MI engineers for programming options
11	<b>Temperature</b>	Operating Temperature Range -30°C~+85°C
		Storage Temperature Range -40°C~+125°C
11	<b>Dimensions</b>	138mm (L) x 66mm (W) x 1.6mm (T)





# ENEPOWER

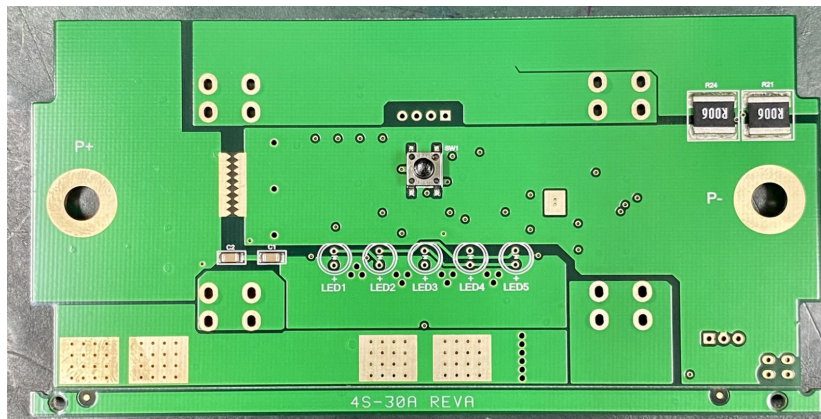
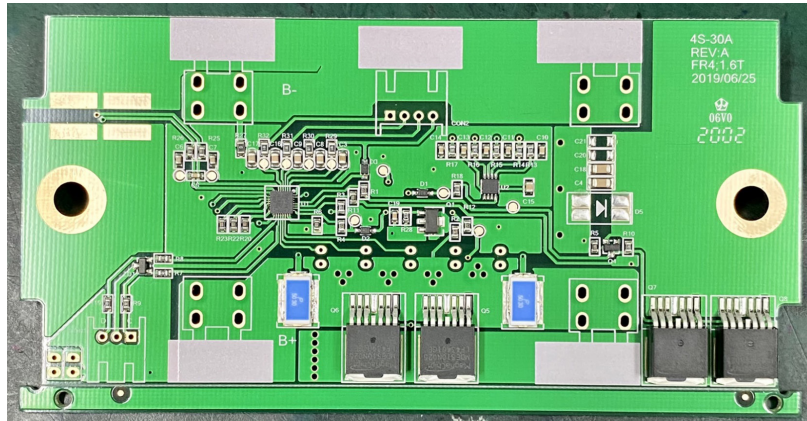
## MIBMS-4S30A-LFP-01

### Protection Circuit Module (PCM)

LiFePO<sub>4</sub>

## PCM for 12.8V LiFePO<sub>4</sub> Battery Pack

### IMAGE



### CONNECTION DIAGRAM

