

Protection Circuit Module

PCM / BMS / PCB

For 44.4V 12S Li-ion/Li-Polymer Battery Packs

Item		Contents	Criteria(Adjustable)
1	Model	HCX-D596L112S80A-02 (R5460N214AF)	12S-80A working current
2	Voltage	Charging voltage	50.4V
3	Current	Maximal continuous charging current	20A
		Maximal continuous discharging current	80A
		Current consumption	≤50μA
4	Overcharge Protection	Over charge detection voltage	4.25V±0.025V
		Over charge detection delay time	700mS-1300mS
		Over charge release voltage	4.05V±0.05V
5	Over Discharge Protection	Over discharge detection voltage	2.80V±0.07V
		Over discharge detection delay time	80mS-170mS
		Over discharge release voltage	3.0V±0.1V
6	Over Current Protection (1st Protection)	Over current detection current	160A±20A
		Detection delay time	174mS-406mS
		Release condition	Cut load, automatically recover
7	Over Current Protection (2nd Protection)	Over current detection current	260A±30A
		Detection delay time	10mS-25mS
		Release condition	Cut load, automatically recover
8	Short Circuit Protection	Short circuit detection current	>=630A
		Detection delay time	150uS-500uS
		Release condition	Cut load, automatically recover
9	Balance	Balance voltage for single cell	4.20V±0.025V
		Balance current for single cell	84mA±10mA
10	Resistance	Inner resistance	≤20mΩ
11	Temperature	Operating temperature range	0 ~ +85°C
		Storage temperature range	0 ~ +85°C
12	Size (L*W*H)	L120mm*W80mm*H20mm	

Note: Characteristics subject to change without notice

LiTech Power Co., Ltd

Factory Dongguan: 4F, Bldg B, RuiXin HengYe Industrial Park, TaiXing Rd # 18A, ShiGu District, TangXia Town, DongGuan, China

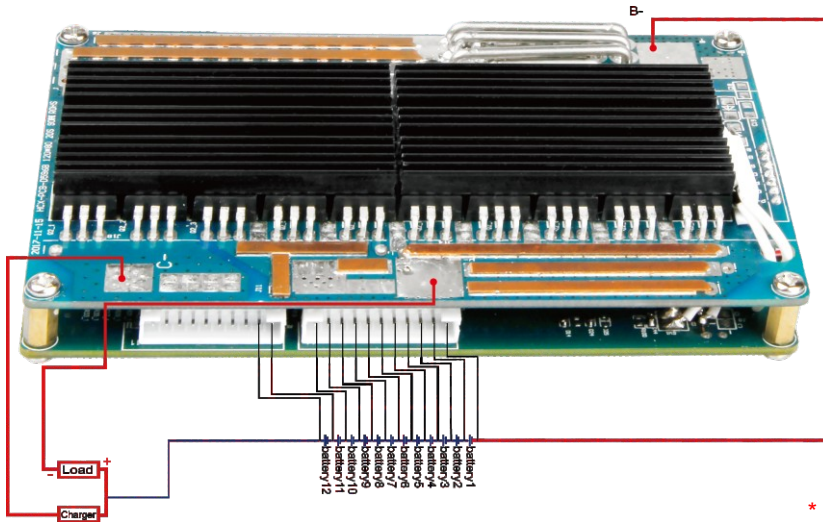
Factory Shenzhen: 3F, Bldg 3, Fulian Industrial Park, Heping Industrial area, Jianhui Rd, Longhua, ShenZhen, China

Tele: +86 769 8203 3052 | Fax: +86 769 82033050
www.LiTechPower.com | info@LiTechPower.com

Specifications and data are subject to change without notice. Contact LiTech Power for latest information.

Copyright © LiTech Power Co.,Ltd. All Rights Reserved.

Connection Diagram:



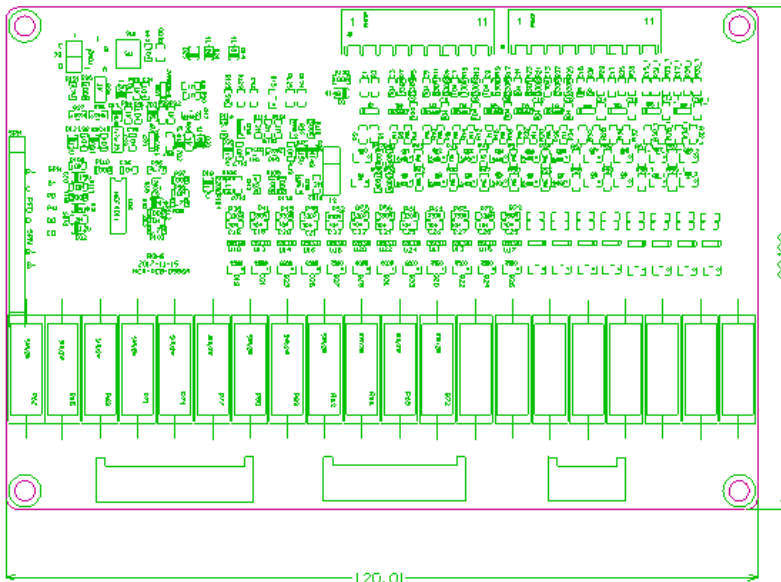
Remarks:

Charge, Discharge at different Port
 P+=B+=Charge+/Discharge+
 Ch=Charge-
 P-=Discharge-

* BMS with E-Switch//ON-OFF Switch (optional)
 During charging and discharging,
 The Switch should be on(connected)

* Note: The switch is not included, BMS has the E-Switch function. When the switch is off, the output will be shut down completely!

PCB Layout:



Note: Characteristics subject to change without notice

LiTech Power Co., Ltd

Factory Dongguan: 4F, Bldg B, RuiXin HengYe Industrial Park, TaiXing Rd # 18A, ShiGu District, TangXia Town, DongGuan, China
 Factory Shenzhen: 3F, Bldg 3, Fulian Industrial Park, Heping Industrial area, Jianhui Rd, Longhua, ShenZhen, China

Tele: +86 769 8203 3052 | Fax: +86 769 82033050
 www.LiTechPower.com | info@LiTechPower.com

Specifications and data are subject to change without notice. Contact LiTech Power for latest information.