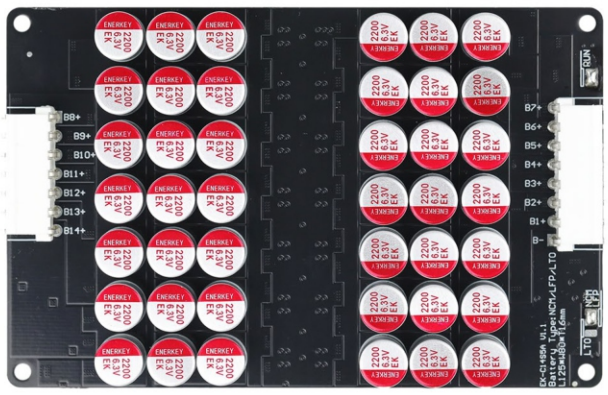
EK-C14S5A

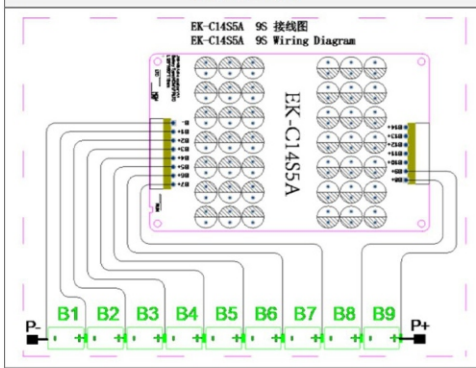


EK-C14S5A Parameter Description		
Battery string	9/10/11/12/13/14S	
Size(mm)	Size (mm)	Size with Acrylic Case(mm)
	L125*W80*T16	L69.5*W58.5*T27.5
Weight	Weight with box	Weight with box and Acrylic Case
	0.22kg	0.29kg
Suitable Battery type	NCM / LFP (Li-ion/Lifepo4)：3S-4S NCM / LFP/ LTO (Li-ion/Lifepo4/Lto)：5S-21S	
Suitable Battery capacity	30AH-300AH	
Base material/Surface treatment	FR-4/HASL	
Single cell voltage operating range	Li-ion/Lifepo4：2.7-4.2V LTO：1.8-4.2V	
Undervoltage protection sleep voltage	Li-ion/Lifepo4:<2.7V LTO：<1.8V	
Equilibrium method	Patented (patent number: ZL 2019 1 1259513.3) balancing architecture Fit capacitor method, the entire battery pack is balanced at the same time.	
Equilibrium current	0.1V voltage difference is 1A balancing current, voltage difference is proportional to balancing current, maximum allowable operating current is 5.5A	
Balanced Cascading	Support balanced cascading for battery packs, for example , it can cascade for 11S , 24S ,36S , 48S....and so on	
Whether need an external power supply	No external power supply is required, relying on the internal energy transfer of the battery to achieve balance of the entire	
Voltage equalization accuracy	5mV(Typical value)	
Feature	24H Non-stop overall balancing, supports cascading, undervoltage protection, ultra-low loss, etc.	
Application	Outdoor energy storage, home energy storage, industrial and commercial energy storage, RV modification, low-speed vehicles, solar photovoltaic, etc., temporarily used for battery balancing maintenance, repair, etc.	

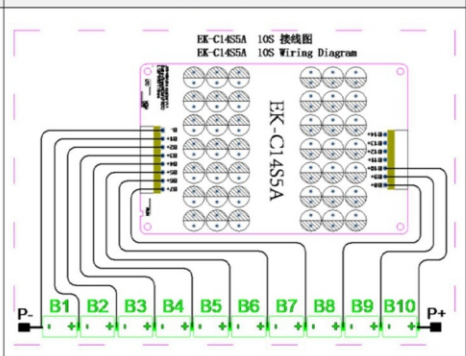
EK-C14S5A Instructions

Wiring diagram

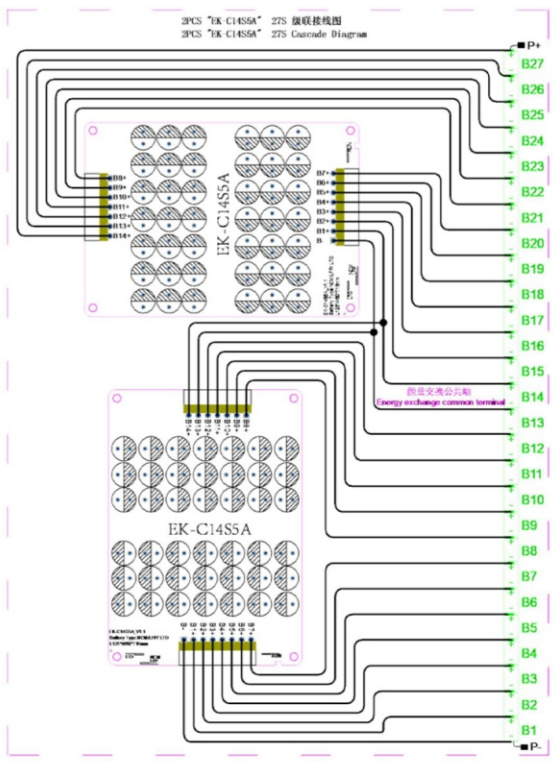
Single board(9S)



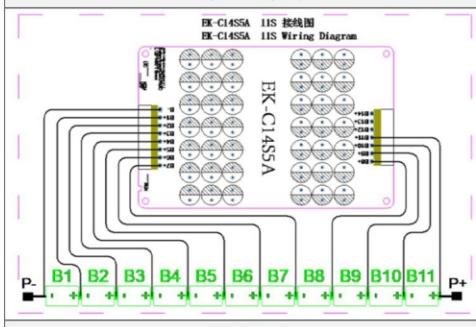
Single board(10S)



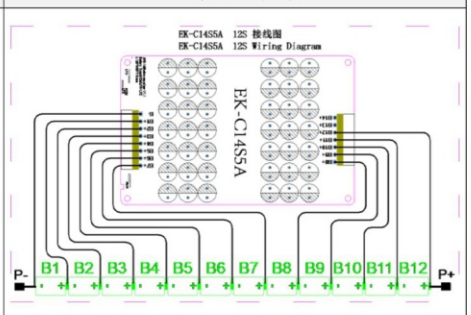
Cascade



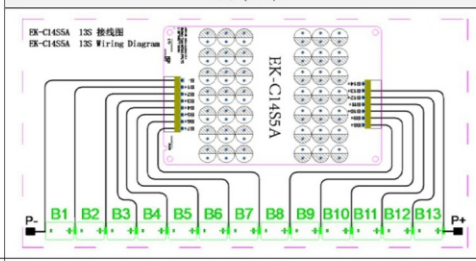
Single board(11S)



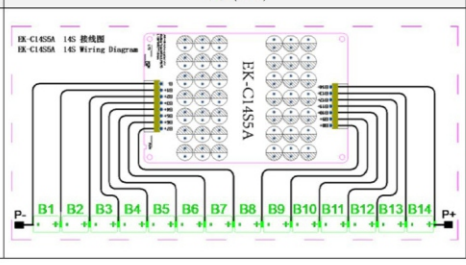
Single board(12S)



单板(13S)



单板(13S)



Wiring precautions

①. The assembly of this product requires welding operations; please strictly follow the wiring diagram!
If you have any questions during the assembly process, please contact after-sales personnel.
②. When assembling, please weld the terminal wire to the battery pack first, and then insert the terminal wire into the product.
③. After connecting the battery, please pay attention to the insulation protection of the product to avoid short circuit when power is on.
④. When used in cascade, there must be at least one "energy exchange common terminal" between each two balancing boards.
⑤. Cascade use is a high-voltage environment, please repeatedly check whether the wiring is correct.
If it cannot be used after connection, please contact after-sales personnel to consult the corresponding cascade wiring diagram.

Suitable battery types switching

Applicable battery type	Pad number in the picture	Physical illustration	Remark
LTO Lithium titanate	1+2 connect (Illustration frame ①)		Customers need to weld and switch by themselves
NCM ternary lithium LFP Lithium iron	2+3 连接 (Illustration frame ②)		Factory default mode

External switch description

"Illustration frame ③" can be connected with an external switch to control the opening and closing of equalization.
The factory default is to connect the battery pack and automatically turn on balancing

Indicator light description

Always on-------Balance at work

Extinguish-------Under voltage sleep