

# ▶ EK24S10EB



EK-24S10EB Parameter Description	
Size(mm)	L156*W144*T28mm
Weight with box	1.06kg
Battery type	NCM / LFP/ LTO (Li-ion/Lifepo4/Lto)
Battery string	External power supply: 2S~24S
	Powered by battery: 4S~24S
Base material /Surface treatment	FR-4/HASL
Single cell voltage collection range	1.5V~4.5V
Undervoltage protects sleep voltage	APP custom Setting: 1.5V~4.2V
Equilibrium method	Time-sharing single channel transfer, point-to-point energy transfer
Balanced Cascading	Support balanced cascading for battery packs, for example , it can cascade for 11S , 24S ,36S , 48S....and so on
Equilibrium current	APP custom Setting: 1A-10A
External interface	CAN
Whether need an external power supply	External power supply (Accuracy±1mV)
	Powered by battery (Accuracy±3mV)
Voltage equalization accuracy	External power supply (Accuracy±1mV)
	Powered by battery (Accuracy±3mV)
Feature	Supports Bluetooth and APP custom settings, real-time display battery status, support cascading, power-off detection, wrong wiring protection, reverse connection protection, fault alarm, etc.
Application	Used for battery packs of small sightseeing vehicles, scooters, shared cars, high-power energy storage, base station backup power supplies, solar power stations, etc., for battery balancing maintenance and repair, etc.

## EK-24S10EB Instructions

	<p><b>24S</b></p>	<p><b>16S</b></p> <p>When less than 24 battery strings are connected in series, empty pins are suspended. The following uses 16S as an example</p>																					
<p><b>Wiring diagram</b></p> <p>(The use of battery power or DC adapter power supply, its wiring method is the same, only the following two differences:</p> <p>① Battery power supply support 4S-24S, voltage balancing accuracy <math>\pm 3\text{mV}</math>;</p> <p>② DC adapter power supply support 2S-24S, voltage balancing accuracy <math>\pm 1\text{mV}</math></p>																							
	<p><b>4S</b></p> <p>When battery power is used, at least four battery strings in series can be connected. The following figure shows the installation and connection method</p>		<p><b>2S</b></p> <p>When DC power is used, at least two battery strings in series can be connected. The following figure shows the installation and connection method</p>																				
	<p><b>36S Cascading</b></p> <p>The EK-24S8EB / EK-24S10EB can be used in cascading mode. At least one battery is used as the common end of the energy exchange between two equalizers. The following uses 36S as an example.</p>																						
<p><b>Wiring precautions</b></p>	<p>①. Installing an equalizer requires a certain amount of knowledge about electronics.</p> <p>②. When connecting cables, solder the terminal cable to the battery string, and then insert the equalizer.</p> <p>③. When cascading is used, there is at least one common end of energy exchange between each two equalizers. During welding, pay attention to whether the connection is correct and whether there is a phenomenon such as false welding.</p> <p>④. The cascade is used in a high-voltage environment. Please check whether the wiring is incorrect. If it cannot be used after connection, please contact after-sales personnel for the corresponding cascade diagram.</p>																						
<p><b>Indicator light description</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Indicator</th> <th style="width: 25%;">Indicator color</th> <th style="width: 25%;">Indicator Steady on</th> <th style="width: 25%;">Indicator Flashed</th> </tr> </thead> <tbody> <tr> <td>Power supply</td> <td>Green</td> <td>Power good</td> <td>/</td> </tr> <tr> <td>Bluetooth</td> <td>Blue</td> <td>Connection successful</td> <td>Connection break</td> </tr> <tr> <td>Balance</td> <td>Yellow</td> <td>Balanced completion</td> <td>In balance</td> </tr> <tr> <td>Fault</td> <td>Red</td> <td>The number of batteries does not match the configuration</td> <td>The resistance of the equalizing line is too large</td> </tr> </tbody> </table>			Indicator	Indicator color	Indicator Steady on	Indicator Flashed	Power supply	Green	Power good	/	Bluetooth	Blue	Connection successful	Connection break	Balance	Yellow	Balanced completion	In balance	Fault	Red	The number of batteries does not match the configuration	The resistance of the equalizing line is too large
Indicator	Indicator color	Indicator Steady on	Indicator Flashed																				
Power supply	Green	Power good	/																				
Bluetooth	Blue	Connection successful	Connection break																				
Balance	Yellow	Balanced completion	In balance																				
Fault	Red	The number of batteries does not match the configuration	The resistance of the equalizing line is too large																				