

BATTERY GUARD KIT



Battery monitor and equalizer

For the new battery bank of 24Vdc or 48Vdc which being composed by several batteries connection in series, minor difference of internal leakage current will cause undercharge or overcharge of parallel or series connected batteries. The frequent encountered Partial Stage of Charge (PSoC) makes this situation even worse, as the result of rare opportunity to fully charge the battery.

Battery Guard equalizes each battery individually and in the meantime monitors the real time voltage and temperature of each battery unit. The SOC difference will be iron out during charging.

Taking an example of 48Vdc battery bank composed by 4units 12V battery in series connection, when one unit voltage is higher than the others and meantime the average voltage of each unit is higher than 13V, its corresponding module will trigger on. The BGK will draw a current of up to 200mA from the battery (or parallel connected batteries) with the higher voltage. This will help all batteries in series/parallel connected to have the same stage of charge.

Working with TBB inverter or system monitor, BGK can improve battery life span, also with alarm for over voltage and under voltage of individual battery. It will send real time data to TBB inverter or central monitor. There is LCD display on each module as well showing voltage and temperature



Model No.	BGK-02	BGK-12
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Electrical parameter

Voltage range (V)	1.9~3.0	11.5~17.0
Maximum balancing Current (mA)	1000	200
Alarm trigger level (mV)	40	200
Alarm trigger reset (mV)	20	100
Maximum module number (PCS)	24	4
Over Voltage Protection	Yes	
Over temperature protection	Yes	

Others

Display	Digital tube+LED
Communication port	RS485
Dimensions (mm)	85x85x35
Operating temperature	-25°C~60°C
Humidity (non condensing)	95%
Weight (kg)	0.4
Protection category	IP22
Cooling	Natural cooling

Standards

Safety regulation	EN 60950
Emission,Immunity	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN55014-1, EN55014-2