

TRIDENT

Smart Battery Charger

12VDC • 10A / 25A / 40A

24VDC • 20A

BS1210 / BS1225-3 / BS1240-3 / BS2420-3



Batteries will be permanently damaged by either overcharged or remaining undercharged for a period of time. Trident smart battery charger will continuously deliver managed charging current at any circumstance with built-in battery management features which will be helpful in prolonging your battery life expectancy.

Combined with up-to-date technology and our knowledge with batteries, Trident smart battery charger was especially designed for mobile and marine application, it was an ideal solution for your battery charging on board.

The BS1225-3 / BS1240-3 / BS2420-3 models are designed with up to 3 charging outputs, sufficient for the need of charging two auxiliary batteries and a slave charger for charging starter battery.



Features

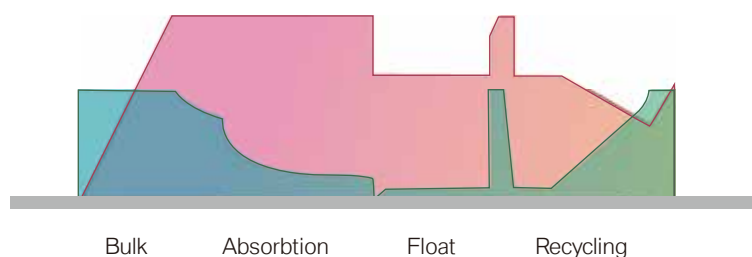
- Active PFC featuring smaller and higher efficiency, max 88%
- Could work as power supply or charger
- Sophisticated TBB premium II multiple stages charging algorithm for lead acid battery
- Suitable for lithium batteries
- Automatic temperature compensation charging
- Remote switch is optional
- Special silent design
- BS1225-3 / BS1240-3 / BS2420-3 models with three isolated outputs, including slave charger for starter battery



TBB premium II charging algorithm

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Model NO.	BS1210	BS1225-3	BS1240-3	BS2420-3
Electrical				
Output voltage (PS mode) (VDC)	13.5V ± 0.27			27.0V ± 0.5
Max output current (A)	10	25	40	20
Nominal input voltage (VAC)	85 ~ 265VAC, 50 / 60Hz	165 ~ 265VAC, 50 / 60Hz		
Charge algorithms	5 steps.soft start, bulk, absorption, float, recycle			
Temperature compensation	Automatically			
Absorption voltage (VDC)	AGM: 14.4V, GEL: 14.1V, LFP: 14.4V, WET: 14.7V			AGM: 28.8V, GEL: 28.2V LFP: 28.8V, WET: 29.4V
Floating voltage (VDC)	AGM: 13.5V, GEL: 13.5V, LFP: 13.5V, WET: 13.7V			AGM: 27.0V, GEL: 27.0V LFP: 27.0V, WT: 27.4V
Charging current (A)	10	25	40	20
Min battery voltage (VDC)	2V			4V
Efficiency	88%			
Input connector	Cable of 1.5 meter with CEE 7/7 plug	IEC socket		
Output connector	Fixed cable, 2.5mm²,1 meter	M4 Screw (16mm²)		
Output	1	2+1		
Ripple noise	≤ 200mVp - p			
Regulation accuracy	≤ 2%			
Cooling	Self cooling	Fan cooling		
Working temperature	-20°C ~ +60°C (40°C~ 60°C reduce the current)			
Protection				
Short circuit	Shutdown output, automatically restart when short circuit is removed			
Reverse polarity	No charging			
Charger over temp	Shut down the charger			
Battery over temp	Shut down the charger			
Structure				
Out case	Aluminum + plastic			
Dimension (mm)	175 x 114 x 53	249 x 165 x 74		
Weight (kg)	1.0	1.6		
IP class	IP20	IP22		