# Smart Battery Charger TRIDENT -12vdc/24vdc

12A / 20A

10A / 25A / 40A



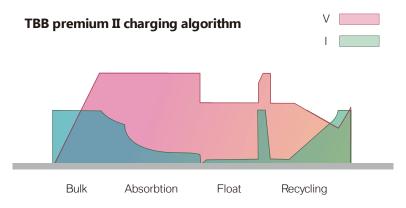


Batteries will be permanently damaged by either overcharged or remaining undercharged for any period of time. TRIDENT smart battery charger will continuously deliver right charging at any circumstance with built in battery management features which will be helpful in prolonging your battery life expectancy.

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.

### **Features**

- Active PFC featuring smaller and higher efficiency, max 88%
- Multiple isolated outputs, including slave charger for starter battery
- 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 is optional
- Special silent design
- Marine model with three outputs is available



Model No.	BS1210	BS1225	BS1240	BS2412	BS2420
		BS1225-3	BS1240-3	BS2412-3	BS2420-3

#### **Electrical**

Nominal output voltage (PS mode) (VDC)	13.5V ± 0.27VDC		27.0V ± 0.5VDC		
Max output current (A)	10	25	40	12	20
Nominal input voltage (VAC)	85 - 265VAC, 50 / 60Hz 165 - 265VAC, 50 / 60Hz				
Charge algorithms	TBB premium II multi stage				
Temperature compensation	Automatically				
Absorption voltage (VDC)	AGM : 14.4V, GEL : 14.1V, LFP : 14.4V, WET : 14.7V AGM : 28.8V GEL LFP : 28.8V WET				
Floating voltage (VDC)				AGM:27.0V GEL:27.0V LFP:27.0V WET:27.4V	
Charging current (A)	10	25	40	12	20
Efficiency	88%				
Input connector	Cable of 1.5 meter with CEE 7 / 7 plug	IEC socket			
Output connector	Fixed cable, 2.5mm², 1	M4 Screw (16mm²)			
Slave charger	N/A	max 3A			
Output	1 1+1				
Output			2+1		
Ripple noise	N/A ≤ 200mVp - p				
Regulation accuracy	N/A ≤2%				
Cooling	Self cooling Fan cooling				
Working temperature	-20°C ~ +60°C				

## Protection

Short circuit	Shutdown output, automatically restart when short circuit is removed	
Reverse polarity	No charging	
Charger over temp	Shutdown the charger	
Battery over temp	Shutdown the charger	

# Standards

LVD	EN60335 - 1, EN60335 - 2 - 29
EMC	EN55014 - 1, EN55014 - 2, EN61000 - 3 - 2, EN61000 - 3 - 3

### Structure

Out case		Aluminum + plastic		
Dimension (mm)	175 x 114 x 53	5 x 114 x 53 249 x 165 x 74		
Weight (kg)	1.0	1.6		
IP class	IP20: For r	nodel with 1 or 2 outputs	IP22: For model with 3 outputs	
Insulation resistance		≥50MΩ		
Dielectric strength		I / P - O / P : 3.0KV, I / P - PG : 1.5KV, O / P - PG : 0.5KV,		

