

## Smart Battery Charger

# TRIDENT series

12Vdc 10A, 25A, 40A



Batteries will be permanently damaged if they are overcharged or left discharged for a period of time.

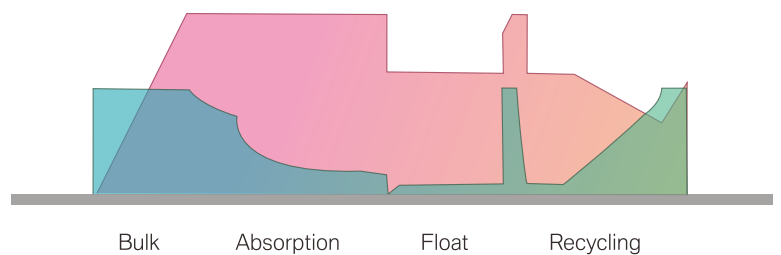
The Trident range of smart battery chargers will continuously monitor and deliver the correct charging profile for all battery types and conditions.



The built in battery management software ensures the batteries life expectancy is maximised.

Using the latest technology and our knowledge of batteries, the Trident range of smart battery chargers are specifically designed for mobile and marine applications where on-board charging is required.



- Active PFC featuring smaller and higher efficiency, max 88%
- Multiple isolated outputs, including slave charger for starter battery
- Automatically 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
- Automatic voltage compensation charging
- Special silent design



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Model No.	BS1210	BS1225	BS1240
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## Electrical

Nominal output voltage (PS mode) (VDC)	13.5V ± 0.256VDC		
Max output current (A)	10	25	40
Nominal input voltage (VAC)	85 - 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		
Floating voltage (VDC)	AGM : 13.5V, GEL : 13.5V, LFP : 13.5V, WET : 13.7V		
Charging current (A)	10	25	40
Min battery voltage (Vdc)	1	2	
Efficiency	88%		
Input connector	Cable of 1.5 meter with CEE 7 / 7 plug	IEC socket	
Output connector	Fixed cable, 2.5mm <sup>2</sup> , 1	M4 Screw (16mm <sup>2</sup> )	
Slave charger	N / A	max 3A	
Output	1	1 + 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	249 x 165 x 74
Weight (KG)	1.0	1.6
IP class	IP22	
Insulation resistance	≥ 50MΩ	
Dielectric strength	I / P - O / P : 3.0KV, I / P - PG : 1.5KV, O / P - PG : 0.5KV,	