

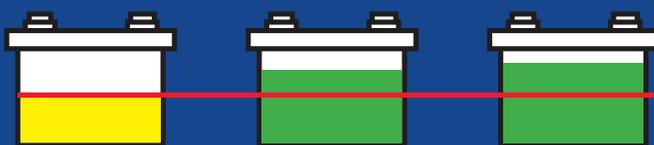
# B.O.S.

## BATTERY OPTIMIZATION SYSTEM



**B.O.S. actively shuttles energy between batteries to keep "the pack" balanced, increasing battery strength and longevity.**

**Batteries in a pack will become "out of balance" and the pack is only as good as its "weakest link".** In watercraft applications, this is further compounded when the trolling motor battery is used for peripherals and/or to assist the cranking battery.



**The pack is only as good as its "weakest link".**

**B.O.S. actively shuttles energy as needed between batteries wired in series to ensure equal voltage before, during and after charging.**



**B.O.S. strengthens the weakest batteries, stabilizing the pack.**

**B.O.S. keeps packs balanced, enabling maximum performance, and quadruples run time on the water.**

**Balanced batteries charge to their fullest potential and last longer.**



[www.pcsdv.com](http://www.pcsdv.com)

PRO Charging Systems



091319

# BATTERY OPTIMIZATION SYSTEM (B.O.S.)

## DATASHEET



- Available in 6V, 8V, and 12V configuration
- Up to six batteries in series
- Battery Selection and Prediction (BSAP-24) algorithm
- Less than 1 mA sleep mode
- Transfer rate up to 7.5A
- Self-powered
- Any type of battery chemistry
- *Used in any application where batteries are in series*

*Marine  
Golf  
Industrial  
Aerial Equipment  
Solar Power  
Electrical Vehicles  
Communications  
Defense/Military*

Premature battery failure due to an unbalanced pack has been, unfortunately, accepted as the 'norm' for decades.

**The B.O.S. answers this call** with a BSAP-24 algorithm that can accurately predict and select the battery that needs additional energy to match the other batteries within the pack. This simultaneously and successfully extends the life of each battery in the pack, as well as increasing run times.

## MODELS

BOS6V4

BOS6V6

BOS8V6

BOS12V2

BOS12V3

BOS12V4

Key: BOS6V4 = 6Volts 4Banks etc.

## BATTERY OPTIMIZATION SYSTEM (B.O.S.)

Input voltage range (system voltage)	24V to 48V
Input voltage range per battery	6V, 8V or 12V
Available batteries	6 (up to 48V pack)
Output power of system	45W
Max output current	7.5A
Protection (mechanical)	IP68
Protection (electrical)	OVP, OCP, OTP, SCP, BOP
Operating Temperature	-40°C to 85°C
Dimensions (L x W x H)	207mm x 83mm x 34mm
Balanced voltage difference	<25mV (Rev B)
Accuracy	<0.5%
Standby current (sleep mode)	<1mA



## IMPROVED RUN TIMES



When a battery pack is in use, runtime is solely dependent on the weakest battery. The B.O.S. will actively shuttle energy from the highest battery(s) to the lowest; thus, increasing available capacity and runtime.

## INCREASED HEALTH



It has been an 'accepted' fact that a user would only get 'X' amount of years out of a battery. With the B.O.S., we exponentially extend those years by keeping the batteries actively balanced, which prevents over and under charging. Furthermore, sulfation is held at a minimum as the weak link battery is no longer taken below the recommended level.

