

# SeaBattery® Power Module

A Reliable Subsea Pressure-Compensated Submersible Battery



Patents Pending

## FEATURES

**Ocean Trench Rated (11,000 m)**

**Capable of Inverted Operation**

**Excellent Capacity Retention**

**Available in 6v, 12v, 24v or 48v Configurations**

**Available in High Current Configurations**

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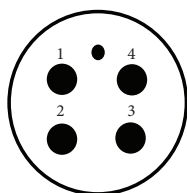


# SeaBattery® Power Module

	SB-6/210	SB-12/80	SB-24/40	SB-48/18
<b>Environmental Specifications</b>				
Depth	11,000 m			
Charging Temperature Range	-15° C to 50° C [5° F to 122° F]			
Operating Temperature Range	-20° C to 60° C [-4° F to 140° F]			
Recommended Storage Temperature Range <sup>2</sup>	0° C to 30° C [32° F to 86° F]			
<b>Electrical Specifications</b>				
Standard Configurations <sup>3</sup>	6 volt, 210 amp hour	12 volt, 80 amp hour	24 volt, 40 amp hour	48 volt, 18 amp hour
Max Discharge Rate <sup>4,5</sup>	Impulse IL4FS: 16 Amps SEACON AWO-3 w/G: 100 Amps			
<b>Mechanical Specifications</b>				
Length	457.2 mm [18.00 in.]			
Width	304.8 mm [12.0 in.]			
Height	323.9 mm [12.75 in.]			
Weight in Air <sup>1</sup>	48.2 kg [106 lbs.] +/- 2%		49.0 kg [108 lbs.] +/- 2%	
Weight in Water <sup>1</sup>	18.2 kg [40 lbs.]		19.1 kg [42 lbs.]	
Case	Molded Polyethylene			
Diaphragm	Molded Polyurethane			
Compensating Fluid	Inert oil			
<b>Connector</b>				
Connector	Right angle diaphragm penetrator on 2-meter cable terminated with Standard: Impulse IL4FS connector Optional: SEACON AWO-3 w/G			
<b>Chargers</b>				
Charger	N/A	SB-CHG-SW/12	SB-CHG-SW/24	SB-CHG-120/48 SB-CHG-240/48

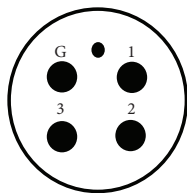
## Standard Connector

## Dimensions & Notes



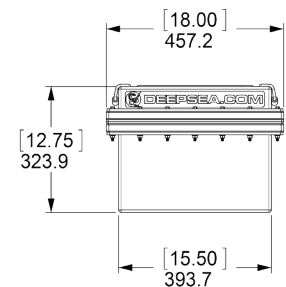
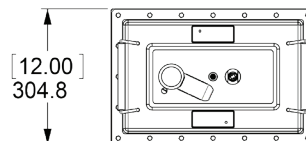
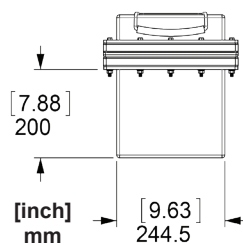
### IL4FS

Pin 1 = Ground  
Pin 2 = + Volts  
Pin 3 = + Volts  
Pin 4 = Ground



### AWO-3 w/G-FS

Pin 1 = Ground  
Pin 2 = + Volts  
Pin 3 = + Volts  
Pin G = Ground



<sup>1</sup> High Current configurations are nominally 1.2 lbs heavier than standard versions.

<sup>2</sup> Self discharge rate varies with ambient temperature. At room temperature (20°C (68°F)) it is about 3% per month, and increases or decreases directly proportional to temperature.

<sup>3</sup> Stated amp hour ratings (Ah) are manufacturer ratings for the lead-acid batteries contained within the SeaBattery™ Power Module. Due to the modifications required to pressure compensate the lead-acid batteries, DeepSea Power & Light manufactures and recommends the use of special chargers. These custom chargers utilize a lower charge voltage than a typical automotive style charger which serves to reduce gas generation and yields improved service life. As a result of the lower charge voltage, capacity (Ah) is reduced. When designing a system, DeepSea Power & Light recommends a conservative approach, as actual battery capacity depends on many factors including ambient temperature, rate of discharge, number of cycles, and age. For critical applications, it is the responsibility of the customer to evaluate the suitability of the product for their application, as well as the required capacity and length of service life.

<sup>4</sup> Standard penetrators are limited by to 16 Amps by the gauge of cable. High Current configurations are capable of a Max Discharge Rate of 100 Amps (50 Amps per contact).

<sup>5</sup> For maximum battery life, do not discharge battery below 75% of rated voltage.

\*Other connectors are available upon request. NRE fee may apply.