## How to choose best marine battery chargers

Chargers for your boat batteries are as important as the engines in the boat. A mariner will never want to experience a dead battery situation while he is out on water. This is why onboard battery chargers play a significant role.

When choosing a battery charger for your boat, it is highly important to look for the best and most reliable battery chargers.



Here is a list that will help you in decision-making for the marine battery charger:

## 1. Types of batteries :

Before going for the search of marine battery chargers, it is important to know that your charger has to be compatible with the chemistry of your boat battery because marine batteries are available in different chemical types. Make sure that your battery has to be compatible with the specific battery chemistry. Chargers that are made specifically for the boats are water-resistant and can be mounted, which is quite convenient.

These days two different type of battery chargers are available in markets. These are:

- Timer controlled chargers
- Smart chargers

But for marine batteries , chargers are available in four different chemical types:

- Flooded
- Gel
- AGM ( absorb glass mat )
- Lithium chargers

## 2. What components you need in a battery charger

A typical charger consist of the following components:

A rectifier circuit , power circuit , control and regulator circuit , ripple monitoring and fault detector circuit. These are the basic components of a battery charger and marine battery chargers has the same components but the only thing that differ them from other is they are super specific to the chemistry of boat battery and voltage.

## 3. Voltage and ampere rating

The voltage for a marine battery charger should have to be a rated output of 10-15% of the total batteries capacity (amp/ hr or Ah ). So that just in case you will need to recharge two group 27 batteries (  $2 \times 105$  Ah ), a 20 amp charger will be a good fit.

The amps totally depends on the size and type of your battery. The higher the amps , the higher will be the recharging process.