

The 300-Watt Light Unit

This light unit requires a power source that can provide at least 25 amps of 12-volt DC power. Usually this accomplished by just clipping on straight to one 12v battery. To determine how long you can run this light unit you must know the Amp Hour or Ah rating of your battery. So, you can divide the rated Ah of your battery by the amp draw of this light (25 amps) and the result is the run time in hours.

$$\text{Ah} / \text{total amp draw} = \text{Run time in hours}$$

Example: If your battery Ah rating is 70 Ah then its $70 / 25 = 2.8$ hours of run time.

***Remember** if you are running other things off those same batteries like a trolling motor, stereo, GPS, lights, etc... You need to add that amp draw to the 25 amp draw of the light then solve the equation with total amp draw.

**** Ah's:** If you cannot find the Ah labeled on your battery, you should be able to find the Reserve capacity or RC or BC. If you can find that number just divide it by 2.4 and that is your baseline Ah rating for your battery. The actual Ah rating is usually 10 – 30 Ah more than this number but at least you know the baseline Ah.

Parallel wiring increases Ah capacity while keeping the volts at 12volts. So you can increase run time if you wire multiple batteries in parallel. Refer to the chart below to understand better.

This chart is an example of parallel wiring batteries with a 70 Ah rating to power a 300-watt 12v light. * (your batteries may have a different Ah rating)

For further questions or more clarification contact us 786 218 2413

# OF BATTERIES	VOLTS	AMP-HR	AMP DRAW	RUN TIME
1	12	70	25	2.8 hrs
2	12	140	25	5.6 hrs
3	12	210	25	8.4 hrs
4	12	260	25	11.2 hrs

PARALLEL

