

LifePo4 (Lithium Iron Phosphate) Battery

A common issue we see is flat and prematurely failed accessory batteries.

Simply, most Accessory Battery Systems we see are unable to maintain the power supply to the fitted equipment and the charging system is not capable of recharging the battery fully.

Typical Vehicle Amp Hour Requirements

| Equipment | AH Load | | AH |
|---|-------------|-----------------|----|
| LED B Size Arrow Board | 2.5 | | |
| Beacons x 2 | 8 | | |
| Surface mount LED lamps x 4 | 6 | | |
| VMS common sign 40% Brightness (common Use) | 6 | 100% Brightness | 15 |
| TOTAL AH Requirement | 22.5 | | |

Expected operational time before degrading the battery life. Based on a common Auxiliary Battery of 12V 100AH, Fully Charged.

Lead Acid

Lead Acid Batteries provide 50% of their AH Capacity before reaching a Discharged State. Note a battery is Discharged (Flat) at 12V. So, with an Arrow Board, VMS (6A) and 2 Beacons operating, 16.5A, Operating time to Discharged would be: 3 hours

Lithium. LifePo4 (Lithium Iron Phosphate)

Lifepo4 will provide a standard depth of discharge of 80%. So, the same load above, operating time to discharge will be 4.85hrs.

LifePo4 includes many other benefits:

- Lower weight, up to 1/3 the weight of lead acid
- Battery Management System inbuilt
- Longer life, warranties from 2-7 years dependant on manufacturer
- Bluetooth connectivity for Battery Management

Our Optimum Suggestion Would be:

Lithium

A system would include:

- Minimum battery size 12V 100AH
- DCDC Charger
- Solar Panel
- 240V Charger or Swappable Battery

Disclaimer: This information is general in specifications; individual performance requirements need to be assessed by you in each case. Our standard 'Sale by Specification' applies as per our 'Terms and Conditions.'

