

# Why Upgrade from Lead Acid to Lithium?

When it comes to choosing the best battery for marine or RV battery applications, **Lithium Iron Phosphate** (also known as **LiFePO4**) technology offers many benefits over lead acid, including – *quick charging, low maintenance, longer lifespan* and far superior performance with much safer operation.

Additional feature and benefit comparisons are detailed below — including Bosch-specific advantages.

## Lithium vs. AGM Batteries

### Lithium Advantages



**2X more calendar life** *than AGM* 



**5X more cycle life** than AGM



2X more usable energy\* than AGM



1/4 the time to fast charge vs. AGM



**1/2** the weight of AGM

## End Customer Unique Selling Points

Extremely Long Lifetime — > 2X longer lifetime even at extreme ambient temperatures

#### Lighter Weight -

Up to half the weight for more vehicle carrying capacity and easy handling

## **High Capacity –**For delivering a large

amount of power over a long time

#### 100% Maintenance Free -

Completely sealed, no fluids to add and no leakage problems



# Excellent Cycling Performance & Stability — 5X more cycles achievable;

# optimized for deep-cycle usage Sleep / Wake Mode

for long periods of non-use or off-season storage while battery is connected; keeps charge without any sulfation

Extremely Fast Charge – Fully loaded in ~2 hours

State of Charge Indicator —
Know your battery's State of
Charge — and use Sleep function
to conserve reserve power

# **Bosch Lithium Marine/RV Batteries vs. Lead-Acid/AGM Batteries**

## Features & Benefits

	Lead Acid/AGM	Bosch LiFePO4
Cycle life	<400 cycles	>3000 cycles
Life span	2-5 years	8-10 years+
Weight	100%	Up to 50%
Usable capacity	50%	>85%
Charge time	6-10 hours	1-5 hours
Maintenance	Medium to High	None
Discharge rate (non use)	High (up to 30%)	Low (2-3%)
State of Charge indicator	No	Yes
Sleep/Wake function	No	Yes

\*Depending on use case; 2X the usable energy on a single charge

# Lithium delivers

Better Performance
Optimal Lifetime
Superior Life Cycle
Capacity Usage Efficiency
Higher Overall Value

