

Battery Bank / Inverter Performance

330 Vantage

Benefits of LiFePO₄ Batteries vs Lead Acid Equivalents

“ The most durable, safe, and reliable energy sources available, in a lightweight, maintenance-free package ”

- Better discharge and charge efficiency
- Longer Life span - Up to 10x longer cycle life (Higher initial cost, but lower cost over time)
- Battery Maintenance System (BMS) built into the battery for extra safety
- More capacity than lead acid equivalents (AGM battery performance roughly 30-40% of lithium)
- Full power available throughout discharge. Voltage does not drop like lead-acid.
- 2.5x more efficient at lower temperatures. Safely operational up to 149°F
- Highly efficient charging can fully charge in 1-3 hours. Built-in overcharge protection
- IP67 Rating - High level of protection against solids and liquids
- Lightweight - greater energy at less than half the weight



Lithium Battery Package

House

- (6) Relion RB100 12V 100Ah house batteries
- 600 amp hour capacity (two posts)

Engine

- (2) Relion RB100-HP 12V 100Ah batteries per engine
- 6 battery posts

Battery Bank / Inverter Performance (Lithium Batteries)

Test A

No Shorepower
Cockpit A/C (100%)
No Engines
No Gyro
Normal 12v loads

> 8 hours

Test B

No Shorepower
Cockpit A/C (100%)
Cabin A/C (100%)
No Engines
No Gyro
Normal 12v loads

6 hrs 50 min

Test C

No Shorepower
Cockpit A/C (100%)
Cabin A/C (100%)
No Engines
Gyro (spooled at dock)
Normal 12v loads

6 hrs 10 min

Grill Usage

Every hour of using
the grill will reduce
battery runtime by
45 min

** AGM Battery Bank should see roughly 33% of the Lithium Battery Bank Performance

Battery Bank / Inverter Performance (engines running)

- No Shorepower
- Cockpit A/C (100% duty cycle)
- Cabin A/C (100% duty cycle)
- Gyro (spooled on battery power at dock)
- Normal 12v loads (Lights, stereo at normal volume levels, and dash electronics)

Both engines provide a maintaining charge back into the batteries. How much of a charge will vary depending upon the state of charge at the beginning, engine RPM, and length of trip.

Port & Strbd Engine RPM	Volts	Amps
820 RPM	13.2	23
1000 RPM	13.2	72
1500 RPM	13.2	90
2000 RPM	13.2	99
2500 RPM	13.2	104
3000 RPM	13.2	104

