



Lithium Group 31  
Drop-in Replacement for  
Lead Acid Batteries



### QUITE POSSIBLY THE WORLDS MOST POWERFUL, RUGGED AND LONGEST LASTING GROUP 31 DEEP CYCLE BATTERY

- Harness the durability of lithium and lower your energy storage operating costs
- Ultimate in ruggedness, meets SAE J930 & SAE J1455
- Superior cold temperature performance vs. lead acid
- Integrated battery management and safety circuits
- Drop in compatibility with any lead acid application

Designed and assembled in U.S.A

## PRIMARY APPLICATIONS



### STATIONARY POWER SYSTEMS

- Solar energy storage
- Diesel generator battery hybrid systems, micro-grids
- Remote monitoring and telemetry systems
- UPS and critical backup



### RECREATIONAL VEHICLES

- House batteries for marine and RVs
- Trolling motor batteries
- Neighborhood Electric Vehicles
- Off-road vehicles
- Golf carts



### TRANSPORTATION & INDUSTRIAL

- Anti-idling systems for law enforcement, emergency response and Class 8 truck
- Material-handling equipment
- Ground Support Equipment
- Floor scrubber equipment

## Key Features & Benefits

• Longer runtime & cycle life lead to lower cost long-term solution for highly demanding deep-cycle applications

• Zero maintenance Lithium Iron Phosphate chemistry, non-spillable, use in any orientation

• Drop in compatible with all legacy Lead Acid or AGM applications, use with any lead acid or AGM smart charger

• Fully integrated battery management system and safety protection circuits, designed and manufactured in USA

• Greater capacity retention at fast discharge rates, stiffer voltage through a discharge, faster recharge capability

• Smart communications to battery electronics provide accurate battery fuel gauge and State of Health

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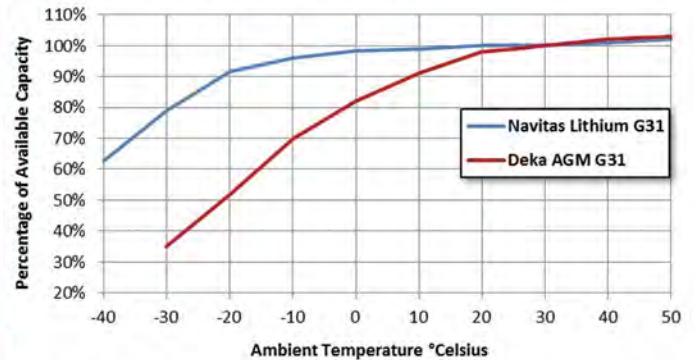


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## Rugged Specifications:

Battery Type	Lithium Iron Phosphate
Operating Temp. Range	-40°C to 60°C
Charging Temp. Range*	0°C to +45°C
Environmental Standards	SAE J930, SAE J1455
Waterproof Rating	IP67
Terminal Type	M8 Threaded Female
Charging Profile	1 hour to 100% charge
Design Life	12 Years
Self-Discharge Rate	<3% Month

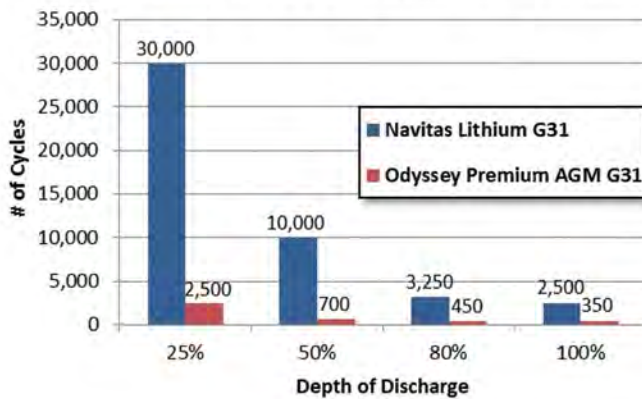
Capacity vs. Operating Temperature



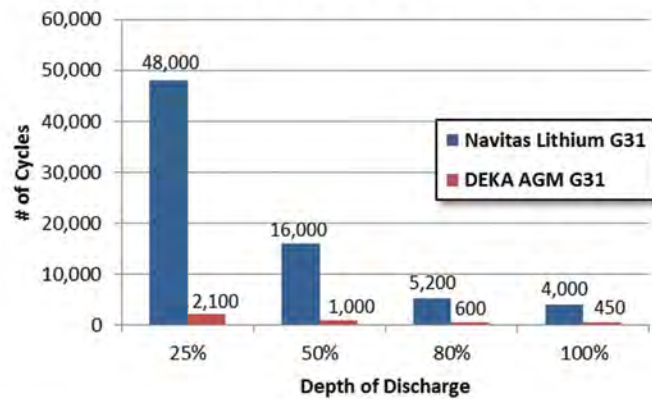
Notes: Navitas Battery Tested at C/10 Discharge Rate

## Highest Durability vs. Premium Lead Acid AGM:

Cycle Life to 80% of Rated Capacity



Cycle Life BCI 2 Hour Test



## Superior Effective Ah Capacity vs. Lead Acid at High Rate Discharge:

Specifications for Lead Acid G31 AGM comparison batteries are taken from manufacturers' specification sheets. Not all Navitas part numbers below are currently available.

Part #	Volts	Nameplate Ah	Discharge Ah Capacity						Reserve capacity	Watt*hrs	CCA	Weight	Length	Width	Height	BCI Group
			10min	30min	1 hour	5 hour	8 hour	20 hour								
LFP-G31-24HE	24	50	48.5	49.75	49.9	40	50	50	240	1200	N/A	32 lbs	13"	6.8"	9.4"	Group 31
LFP-G31-12	12	100	97.0	99.5	99.8	100	100	100	240	1280	N/A	40 lbs	13"	6.8"	9.4"	Group 31
LFP-G31-12HE	12	125	121.3	124.4	124.8	125	125	125	300	1600	N/A	40 lbs	13"	6.8"	9.4"	Group 31
LFP-G31P	12	125	121.3	124.4	124.8	125	125	125	300	1600	550	40 lbs	13"	6.8"	9.4"	Group 31
COMPARE: ODYSSEY AGM G31	12	100	47.7	63.5	71.5	71.5	89.7	100.3	205	1120	1150	78 lbs	13"	6.8"	9.4"	Group 31
COMPARE: DEKA AGM G31	12	98	33.3	52.5	64.5	64.5	88	97.6	200	1090	N/A	70 lbs	13"	6.8"	9.4"	Group 31

\*Navitas lithium battery will deliver more effective starting power at the same CCA as lead acid due to higher lithium voltage output during CCA test.

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