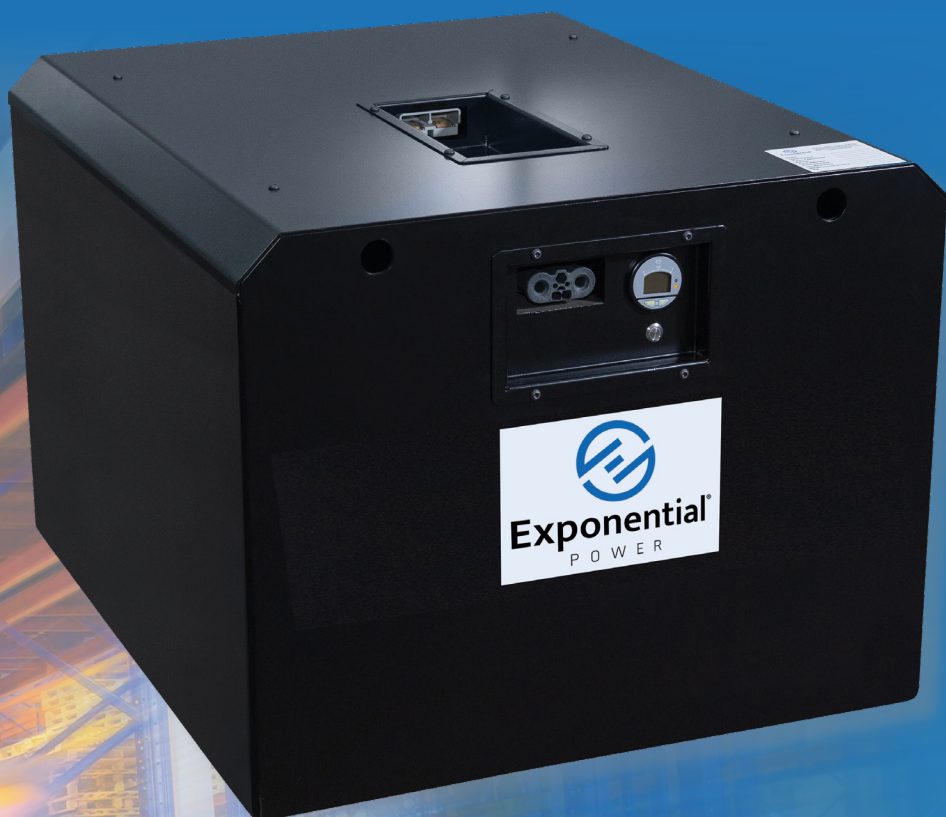




# Motive Power Lithium Technologies





**Exponential**  
POWER

## ABOUT EXPONENTIAL POWER

**Exponential Power** provides industry leading service and cutting-edge technology led by experts who have been powering stationary and motive power applications since 1915. We entered the forklift industry in the 1970's, where we've continued to focus on low downtime, increased productivity, and custom solutions for each customer.

Now, **Exponential Power** is using that knowledge and experience to transform material handling operations with motive lithium technologies. Ideal for heavy duty applications, our motive lithium battery is easy to use, has a longer run cycle, and recharges quickly — all to help our customers meet the ever-increasing demands for production.



**Our Approach Is To Find What Is Right For Your Application.**



## LEAD ACID COMPARED TO LITHIUM-ION BATTERIES

CHARACTERISTICS	LEAD ACID	LITHIUM ION
Life Expectancy	5 Years, 1500 Cycles	8 Years, 3500 Cycles
Energy Density	~ 100 Wh/L	>233 Wh/L
Charging/Energy Efficiency	Up to 80%	Up to 95%
Emissions	Gassing when charging	Environmentally friendly/Emission free
Required Maintenance	Weekly watering and regular maintenance Appropriate PPE required	No watering and minimal effort
Charge Rate	.4C Maximum	1C Maximum
Best Applications	Single battery per shift or multishift applications with opportunity charging	Single battery per truck or multishift, heavy usage applications
Voltage Range	24, 36, 48, 72, 80 and 120V	24, 36, 48, 72, 80 and 120V
Applications	Class I, II, and III forklift and AGV's	Class I, II, and III forklift and AGV's

## APPLICATION AND POWER STUDY

### Opportunity Charging Cost Comparison

LEAD-ACID	Truck Model: 5,000 Capacity Lift w/24-85-21 Lead Acid	LITHIUM ION
\$10,320*	BATTERY	\$24,460
\$3,810	CHARGER	\$4,400
\$24,450	TOTAL	\$28,860
\$800	WATERING ANNUALLY	\$0
\$350	ANNUAL PM COST	\$105
\$150	ANNUAL MISC. REPAIRS	\$150
8 YEARS	LIFE CYCLE	8 YEARS
\$34,850	TOTAL COST TO OWN	\$30,900

\* Lead-acid battery cost must be doubled to achieve an 8-year life cycle comparison.

We offer application analysis and power study to ensure the best recommended solution for your application.

## OUR PRODUCT

### Battery Interface

- Remote and on-board state of charge display
- Dual Port – Charge/Discharge

### BMS & Power Circuit

- Continuous monitoring of crucial operating parameters (voltage, temperature and current)
- Fully regulated charge and discharge parameters
- Integrated balancing function for maximum battery cycle life

### Modular Design

- Maximum safety
- Full monitoring and balancing per cell
- Robust construction
- Serviceability

### Battery Housing

- Available to meet all forklift and AGV applications Class I, II, and III

### Expected Life Based On Opportunity Charging

