

# Motive Power Lithium Technologies





## **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.





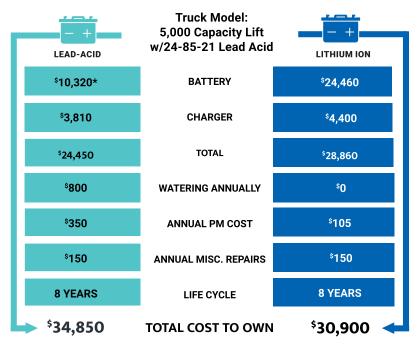
# Our Approach Is To Find What Is Right For Your Application.

## 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**



Expected Life Based
On Opportunity Charging

10
9
8
7
4500 Cycles
1
1
LIFE EXPECTANCY

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



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







# **SERVICE AND DISTRIBUTION LOCATIONS**





**HEADQUARTERS** WISCONSIN \_\_Menomonee Falls N56 W16665 Ridgewood Drive Menomonee Falls, WI 53051 Phone: 262.703.5800

GEORGIA \_\_\_\_ Atlanta 1649 Sands Place SE, Suite C Marietta, GA 30067 Phone: 770.916.1747

MINNESOTA \_\_\_ Minneapolis 240 7th Avenue NE Perham, MN 56573 Phone: 800.638.9890

TEXAS \_\_\_ Houston 207 Deerwood Glen Drive Deer Park, TX 77536 Phone: 713.395.4500

ARIZONA \_\_\_\_ Phoenix 1509 W. Harvard Avenue Gilbert, AZ 85233 Phone: 800.638.9890

ILLINOIS \_\_\_ Chicago 179 Easy Street Carol Stream, IL 60188 Phone: 630.221.1700

NEW YORK \_\_\_ Rochester 400 Mason Road Fairport, NY 14450 Phone: 585.425.1954

WISCONSIN \_\_\_\_ Appleton N922 Tower View Drive, Unit J Greenville, WI 54942 Phone: 920.757.1175

CALIFORNIA Bakersfield 4842 Burr Street, Suite B Bakersfield, CA 93308 Phone: 661.321.9929

INDIANA \_\_\_\_ Fort Wayne 7603 Honeywell Drive Fort Wayne, IN 46825

Phone: 260.420.5170

NORTH CAROLINA \_ \_ Charlotte

COLORADO \_\_\_\_ Denver 18150 E. 32nd Place, Unit D Aurora, CO 80011 Phone: 800.638.9890

LOUISIANA \_\_\_\_ New Orleans 21448 Marion Lane Mandeville, LA 70471 Phone: 985.801.5000

PENNSYLVANIA \_\_\_ Pittsburgh 106 Industrial Park Road Brookville, PA 15825 Phone: 814.849.7171

FLORIDA \_\_\_ Lakeland 3629 Reynolds Road Lakeland, FL 33803 Phone: 863.904.6050

MARYLAND \_\_\_\_ Baltimore 9051 Red Branch Road, Suite H Columbia, MD 21045 Phone: 800.873.8793

TEXAS \_\_\_ Dallas 2670 Observation Trail Round Rock, TX 75032 Phone: 214.247.5150