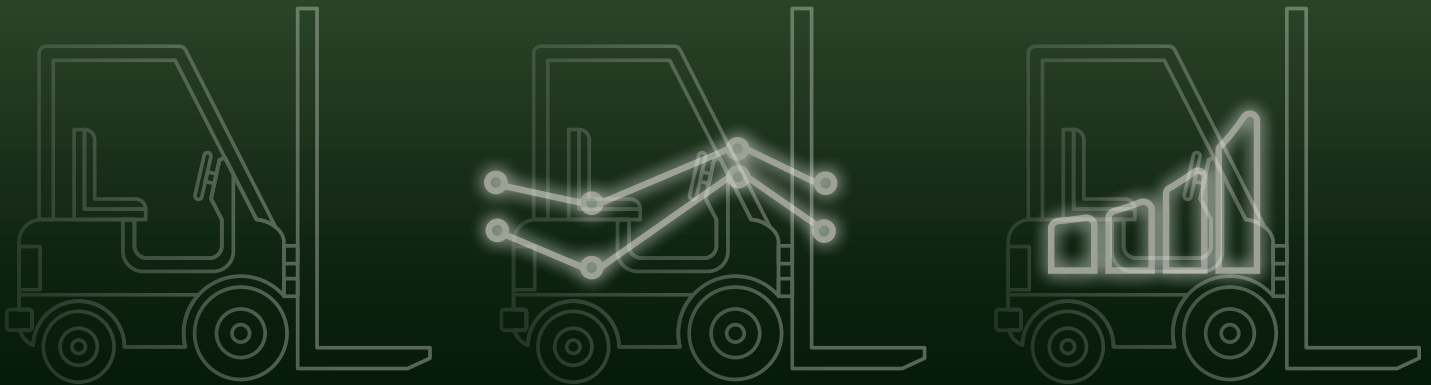


THE PERFORMANCE BEHIND POWER™

# VELOCITY®

LITHIUM POWER SYSTEM



BY CROWN BATTERY

# VELOCITY POWER SYSTEM (VPS) ANYTIME.



**Maintenance-free**  
No water filling or equalization charges required



**High electrochemical efficiency**  
Increased runtime and lower electricity costs



**Rapid charging**  
24/7 availability of machines



**No cooldown periods**  
No battery changeouts required



**Reduced CO<sub>2</sub> footprint**  
LFP is CARB compliant and more eco-friendly than IC trucks



**No ventilation required**  
No need for special charging areas

If you have owned electric material handling equipment, more than likely you either specified, sourced, purchased, or operated a traditional, single chemistry lead battery. If you are reading this, you are taking a step in learning more about the latest in industrial batteries – lithium ion batteries. A challenge is that not all lithium-ion batteries are the same and come in multiple chemistries, cell configurations with different elements and are dependent on specific system components. Please read on to learn more about Crown Battery Manufacturing Company's lithium Velocity Power System (VPS).

## Delivering the performance behind the lithium power includes the following system components.

- + Lithium modular battery power levels with specific operational demand with UL listed prismatic Lithium Iron Phosphate (LFP) standardized cell sizes.
- + Velocity Battery Series has seven (7) modular power levels – 180Ah, 270Ah, 360Ah, 450Ah, 560Ah, 690Ah and 840Ah.
- + Assembled utilizing more than 90% made-in-America connectors, harnesses, wiring and electronics.
- + Designed and engineered with the highest quality robust busbar connections allowing 99% serviceability while the battery is in sit-down lift equipment.



## Multi-sensory alert capability for use in all forklifts.

- + External Battery Discharge Indicator (BDI) adds visual for safety and performance.
- + Velocity Power System is CARB Zero-Emission compliant.
- + As Velocity can receive a faster, rapid recharge up to 1C, you get longer runtimes with a single battery.

## Charging performance with PowerHouse Access lithium-profiles high efficiency chargers that are UL listed.

- + Velocity Battery will work with other chargers utilizing proper lithium algorithm, paired upon approval.



# VERIFIABLE PERFORMANCE. ANYWHERE.

## Superior telematics that monitor battery system performance, anytime – anywhere – on demand.

- + Engineered proprietary software allows for quick updates and modifications when needed.
- + Uniform reporting allows for quick performance diagnosis and trouble shooting with precise reports and accurate data.
- + Cellular connections ensure 24/7 connectivity. Data collected is offered at no charge on a web-based word and you have access via a secured login.



## Providing safer system performance and an extensive list of features designed to protect the battery pack. | Battery Management System (BMS)

- + State of Charge (SOC) calculations.
- + Battery charger control.
- + In addition to cell protection, the BMS protects from over and under temperature based on the programmed MIN/MAX values in the battery profile.
- + Pack temperature monitoring.
- + Intelligent, efficient cell by cell balancing is provided to maximize the usable range of the battery. The BMS also monitors the health of both individual cells and the total pack, and will trigger error codes if either the pack or individual cells are in poor health.

## SUPPORTING SYSTEM FEATURES:

- The Velocity Power System (VPS) industry leading warranty is 5 year/3300 cycles, which is 10% more warranted cycles than the average lithium battery warranty.
- Our Velocity standard warranty is 5 year/3000 cycles when used with other approved chargers.
- A cycle is defined as a cumulative 90% DoD. Velocity Battery life expectancy is greater than 6000 cycles.
- UL 2580 Listings for 36v and 48v will be complete in Q2 2023. Other sizes are in process and based on demand.
- Crown Battery support and service are coordinated through more than 80 independent agent/dealer support sites.
- Financially strong and stable.
- Customer-centric reputable warranty support.
- Providing unbiased chemistry for your specific application. *Get what you need, not what they have to sell you.*
- Decades of experience with battery trade associations, regulatory agencies and HSE partners.
- For nearly 100 years, Crown Battery has been in it for the long haul and keeps you moving. *Most lithium suppliers are pack assemblers with fewer than 10 years in the material handling market.*



System Warranty



UL Certified



Full Integrated Capability



Operating Temperatures  
from -22°F to 140°F



IP65 Rated for  
Water Resistance



Robust Design



Unrivaled Cycle Life



Increased Safety

# VPS MOTIVE POWER SERIES (VPS)

LIB Model Number <sup>15</sup> (XXX = Ahr Level)	Up to WGT <sup>2</sup> (LBS)	Length <sup>3</sup>	Width <sup>3</sup>	Height <sup>3</sup>	Amp Hour Level <sup>1</sup>	Amp Hour Level <sup>2</sup>	Amp Hour Level <sup>3</sup>
<b>24 VOLT</b>							
24-85LI07-XXX-2509	600	25.38	8.56	23.38	270	180	—
24-85LI13-XXX-3113	990	30.63	12.69	23.25	450	360	270
24-85LI15-XXX-3513	1212	35.12	12.94	23.25	560	450	360
24-100LI13-XXX-3113	1100	30.63	12.81	26.25	560	450	360
24-125LI13-XXX-3113	1430	30.63	12.69	30.94	690	560	450
24-125LI15-XXX-3513	1680	35.12	12.94	30.81	840	690	560
24-125LI15-XXX-3614	1680	36.00	14.00	30.50	840	690	560
24-125LI17-XXX-3813	1896	38.12	13.44	30.81	840	690	560
<b>36 VOLT</b>							
36-85LI13-XXX-3816	1560	37.75	15.44	22.88	560	450	—
36-85LI17-XXX-3326	2070	33.13	25.63	22.88	560	450	—
36-85LI17-XXX-3920	1900	38.13	19.94	22.88	560	450	—
36-85LI17-XXX-3227	2070	32.00	26.50	22.88	560	450	—
36-85LI19-XXX-3822	2322	38.13	22.38	22.94	690	450	—
36-85LI21-XXX-3925	2484	38.13	24.63	22.88	840	690	560
36-85LI23-XXX-3927	2550	38.25	27.00	22.88	840	690	560
36-85LI25-XXX-3930	3024	38.25	29.25	22.88	840	690	560
36-85LI27-XXX-3832	3258	38.25	31.50	22.88	840	690	560
36-125LI11-XXX-3813	1890	37.88	13.19	30.50	560	450	—
36-125LI13-XXX-3815	2160	37.75	15.44	30.50	690	560	450
36-125LI15-XXX-3918	2500	38.13	17.69	30.50	690	560	450
36-125LI17-XXX-3620	2600	38.13	19.94	30.50	840	690	560
<b>48 VOLT</b>							
48-85LI15-XXX-3824	1818	38.13	23.63	22.88	560	450	—
48-85LI17-XXX-3927	2560	38.13	26.63	22.88	560	450	—
48-85LI19-XXX-3930	2825	38.13	29.63	22.88	690	560	450
48-85LI21-XXX-3933	3300	38.25	32.75	22.88	840	690	560
48-85LI21-XXX-3833	3740	38.25	32.75	22.50	840	690	560
48-85LI25-XXX-3938	4030	39.00	38.25	22.50	840	690	560
48-125LI13-XXX-4421	2880	43.63	20.63	30.81	690	560	450
<b>80 VOLT</b>							
80-125LI09-XXX-4028	3480	40.38	27.81	30.50	560	450	—
80-125LI11-XXX-4033	4250	40.44	33.40	30.50	560	450	—
80-125LI13-XXX-4039	4800	40.13	39.06	30.50	690	560	450

1. These 93 models/sizes reflect the most popular lead battery types and there are many more available that can be modified to meet specific truck dimensions or applications.

2. Weights are either listed in actual pounds or up to a certain weight as indicated by "4800" lbs.

3. It is imperative that dimensions and weights are measured and confirmed, in advance of quotes or orders, to meet and satisfy individual equipment specifications.

4. 36 volt & 48 volt series are UL Listed as of 05/2023.

5. XXX = the actual capacity of the modular power level (1-3) verified by a power study.



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