

12V 310Ah Battery

NX Series



CAT # NX-12V310-A1508



SMARTER POWER. BUILT IN.

This next generation NX Series delivers high-current performance in a compact form factor. Built on Lithionics' proven safety platform, it eliminates the need for an external BMS or circuit breaker while maintaining system reliability and performance.

KEY BENEFITS

- + **Multiple Layers of Integrated Protection:** Internal advanced Battery Management System (BMS) with safety features tested to extreme conditions.
- + **High-Current Output Capability:** Up to 300A for demanding inverters, motor loads, and peak-load applications.
- + **Thermal Management Design:** Aluminum construction facilitates efficient heat conduction away from critical components.
- + **Bluetooth System Monitoring:** Enables real-time battery status, diagnostics, and system data access.
- + **Consolidated System Architecture:** Integrated design reduces external components and simplifies installation.

Battery Details

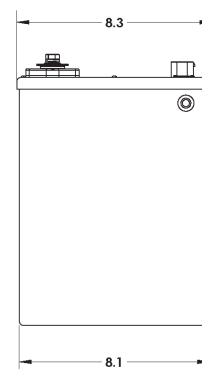
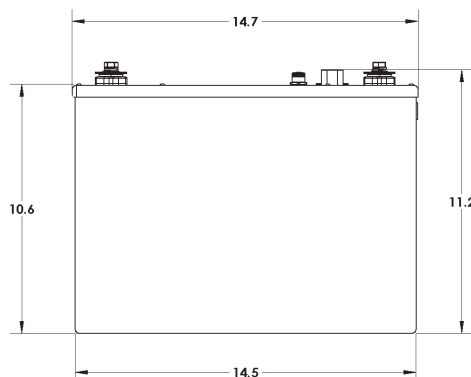
310Ah at 12.8V
3,968 Watt-Hours



UL 1973 Pending
for Motive Applications

DIMENSIONS

Size (L x W x H)	14.7" x 8.3" x 10.6"	373.4mm x 210.8mm x 266.7mm
Weight	61lbs	27.6kg



SPECIFICATIONS

NOMINAL VOLTAGE AND CAPACITY

12.8V 310Ah 3,968Wh

SHIPPING

UN3480, Class 9

CERTIFICATIONS

UNDOT UN38.3 Approved

UL UL1642, UL1973 Listed Complete Battery Assembly (Pending)

INTERNAL HEATER

Power Rating 35W

Thermostat On/Off (Internal) <37°F (3°C) On, >41°F (5°C) Off

MECHANICAL

Mounting Orientation Upright position only (black lid up)

Enclosure Material 0.09" Aluminum 5052

Enclosure Corrosion Protection Iridite Chromate Conversion Coating + Powdercoat Paint

Ingress Protection IP66

STORAGE

Refer to the Lithionics® Website for the Storage Procedure

ELECTRICAL

Internal Resistance <3mΩ

Coulombic Efficiency 99%

Self-Discharge Rate (per month) <3%

Cell Type LiFePO₄ Prismatic Cells

Power Connection Brass Terminals, Nickel Plated, M8-1.25 Female Threads

CHARGE

Bulk Voltage 14.4V ±0.2V

Operating Temperature Range 32°F (0°C) to 140°F (60°C)

Recommended Charge Current <150A

Float Voltage 13.6V ±0.2V

Max Charge Current 300A

DISCHARGE

Operating Voltage Range 10.8V to 14.4V ±0.2V

Discharge Temperature Range -4°F (-20°C) to 140°F (60°C)

Recommended Discharge Current <150A

Max Discharge Current¹ 300A

Pulse Current (1 second) <1,200A

Pulse Current (8 seconds) 800A (Pending)

Low Cut-Off Voltage 10.8V ±0.2V

Reserve Voltage Cut-Off 12.6V

1. Maximum charging and discharging rates dependent upon the ambient temperature and usage.

Configured with Confidence

Engineered for reliability. Built for scale. Work with our experts to design the right power system for your application.