



US 12V G24

• ESSENTIAL LI®

- BCI Group 24, 12V
- Reserve Capacity (Ah): 100
- Energy [kWh]: 1.2
- Weight: 22.7 lbs.
- Length: 10.24 in (260 mm)
- Width: 6.61 in (168 mm)
- Height: 8.27 in (210 mm)
- M8



U.S. Battery's exclusive new Essential Li® Lithium-ion battery line is engineered with safety in mind and features redundant control mechanisms and Lithium Iron Phosphate (LFP) cell chemistry, widely considered the safest and most robust option currently available. Each battery features an intelligent built-in Battery Management System (BMS) that monitors the status of the pack. The new line is designed to be a long-lasting, maintenance-free, lightweight, alternative option to Lead Acid batteries.

Essential Li Features:

- **IP65 rated construction** prevents damage from outside particles and moisture.
- **Mobile App Enabled** integrated into the battery allows users to monitor the State of Charge and pack status from their mobile devices.
- **Scalable** multiple batteries can be used in parallel for increased capacity
- **Integrated Battery Management System (BMS)** Helps ensure accurate State of Charge (SOC), cell balancing, and fault detection and handling for optimal performance.
- **Wake Button and LED Indicator** enables users to check the State of Charge and pack status.





DATA SHEET

MODEL **US 12V G24**

VOLTAGE **12V**

CAPACITY **100Ah**

INTELLIGENCE **Integrated Battery Management System**

BATTERY TYPE **(BMS)**

PRODUCT + PHYSICAL SPECIFICATIONS

BCI Group Size	Type	Voltage	Terminal Torque	Terminal Type ^G	Dimensions ^C Inches (mm)			Weight Lbs. (kg)
					Length	Width	Height ^F	
GC2	US AGM 6V260	12.8	90 IN-LBS	M8	10.24 (260)	6.61 (168)	8.27 (210)	22.7 (10.3)

ELECTRICAL SPECIFICATIONS

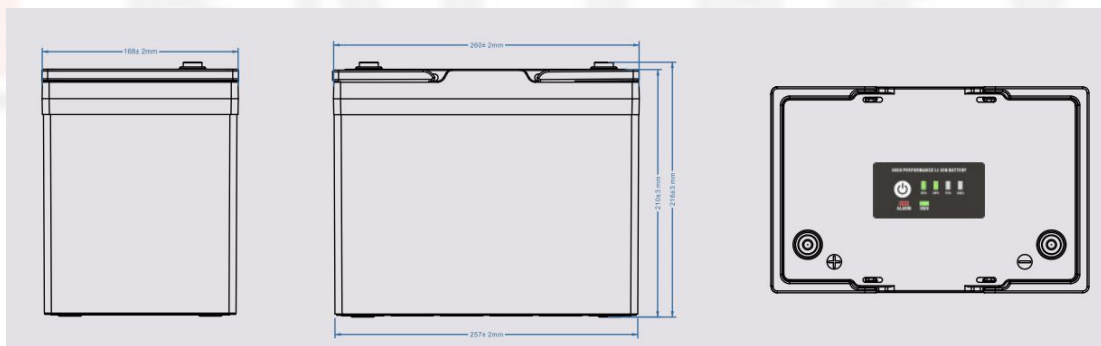
Capacity	Max Continuous Discharge Current	Max 15s Discharge Current	Max 0.2 Discharge Current	Max Charge Current	Self Discharge Rate	Low Voltage Cutoff	High Voltage Cutoff
100 Ah	100A	110A	300A	100A	<3%/month	10V	14.8V

OPERATIONAL SPECIFICATIONS

Discharging	Charging	Storage
-4° F~131° F (-20° C~55° C)	32° F~122° F (0° C~50° C)	50° F~95° F (10° C~35° C)

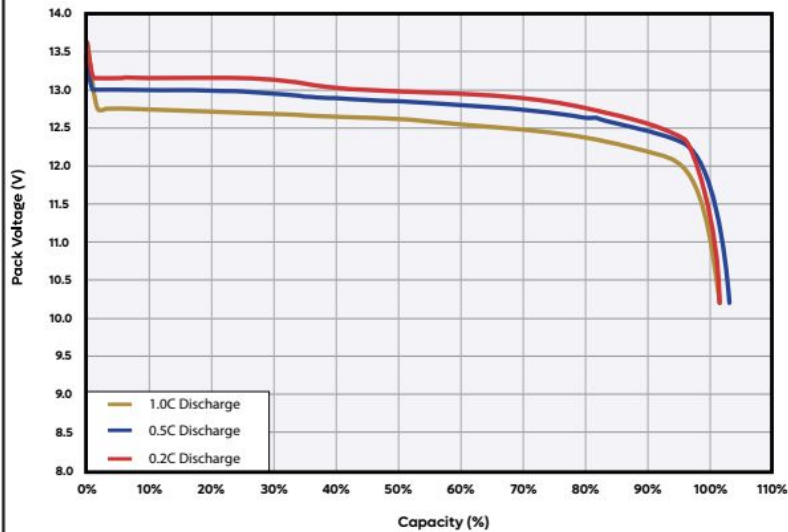
SAFETY/REGULATORY INFORMATION

Certifications			
Transport	Shipping Classification	Cells	Pack
UN/DOT 38.3	UN3480, Class 9	UL1973, UL9540A, IEC62619	TBD

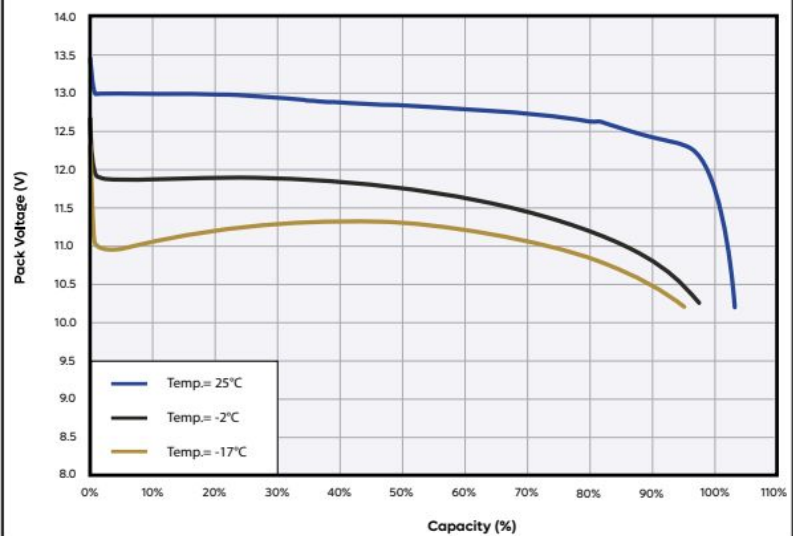


US 12V G24 - DATA SHEET

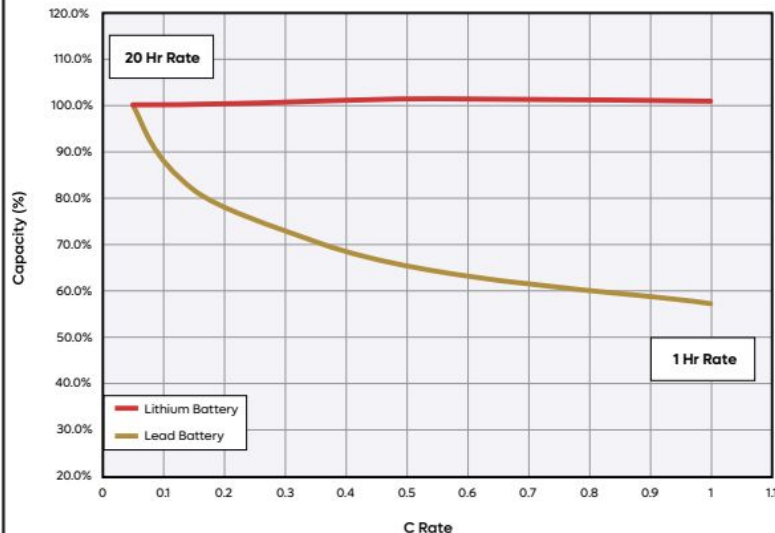
Performance of 12V Lithium Battery Pack @25°C



Performance of 12V Lithium Battery Pack @0.5°C



Lead Battery Vs. Lithium Battery
(Capacity at Different C Rates)



Battery Charging

- Essential Li[®] 12V Lithium-Ion battery is compatible with most common 12V AGM lead-acid battery chargers.
- Chargers that require the detection of voltage at the battery terminals to charge may fail to wake the Li-Ion battery from the protection mode.
- To charge a single 12V battery, the suggested charging voltage is between 14.2V and 14.6V.

