

# US 48V 105 - Data Sheet

# ESSENTIALi<sup>®</sup>

POWERED BY U.S. BATTERY MFG. CO.



**Lithium-Ion Battery**  
**51.2 V | 105AH (5.38kWh)**  
 CELL CHEMISTRY:  
**Lithium Iron Phosphate (LFP)**  
 CASE:  
**SECC Steel**  
 Dimensions:  
**17.44" w x 12.60" l x 10.32" h**  
 BCI GROUP SIZE:  
**N/A**

## FEATURES

- **IP67 rated construction** prevents damage from outside particles and moisture.
- **CAN Networking** automotive grade connections allow manufacturers to integrate the battery with devices such as motor controllers and chargers to allow for communication of battery status.
- **Scalable** multiple batteries can be used in parallel for increased capacity.
- **State-of-the-Art Battery Management System (BMS)** Utilizes intelligent algorithms to help ensure accurate State of Charge (SOC), delivers advanced cell balancing, and enhanced fault detection and handling for optimal performance.

## BATTERY SPECIFICATIONS

BCI Group Size	Model	Terminal	Terminal Torque	Dimensions (mm)(±3mm)			Weight (kg)
				Length	Width	Height	
N/A	US 48V105Ah	M8 insert	90 IN-LBS	17.44" (443)	12.60" (320)	10.32" (262)	92.6 (42)

Internal Protection information: See User's Guide [www.usbattery.com/info-center/essentialiowner](http://www.usbattery.com/info-center/essentialiowner)

## ELECTRICAL SPECIFICATIONS

Voltage	Capacity	Max Continous Discharge Current	Max 30S Discharge Current	Max 10S Discharge Current
51.2 V	105 Ah	150A	250A	300A
Max Charge Current	Self Discharge Rate	Low Voltage Cutoff	High Voltage Cutoff	
105A	3.5%/month (In Off Mode)	40V (Cell 2.5V)	58.4V (Cell 3.65V)	

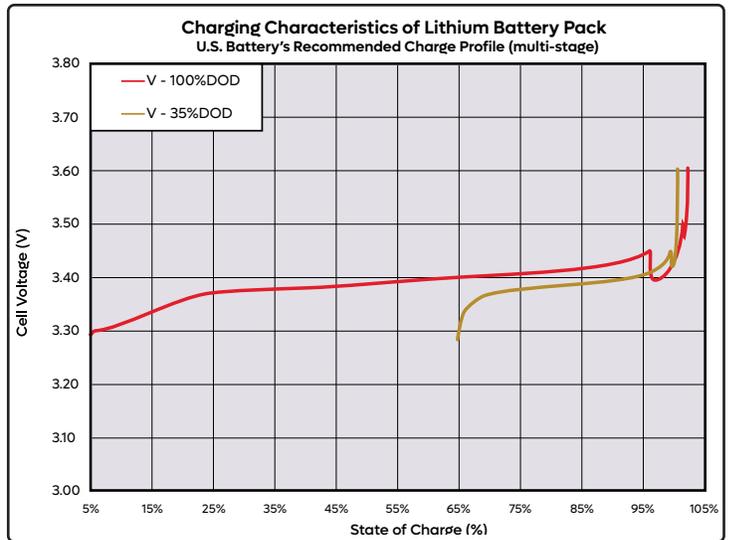
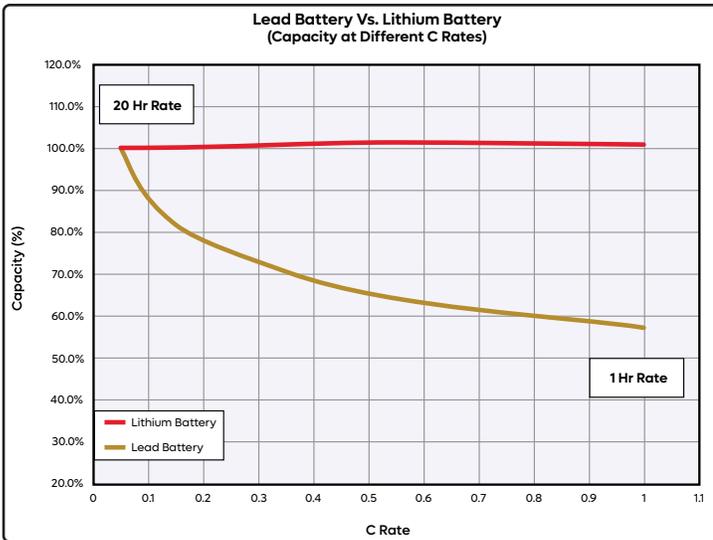
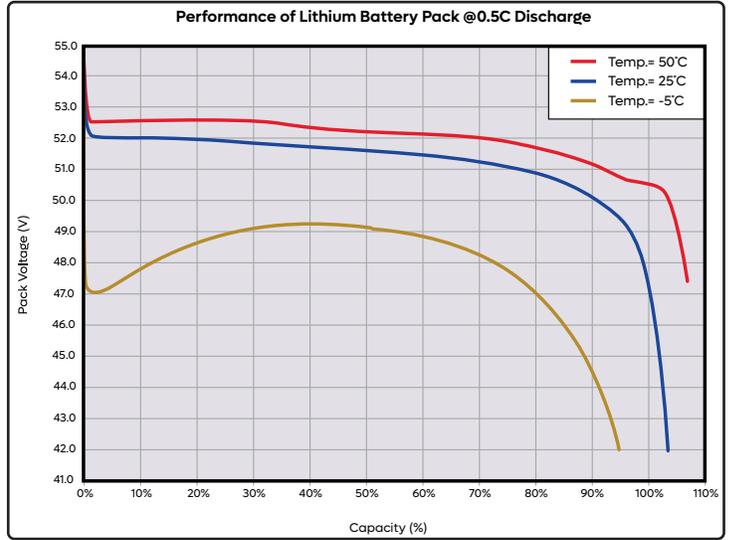
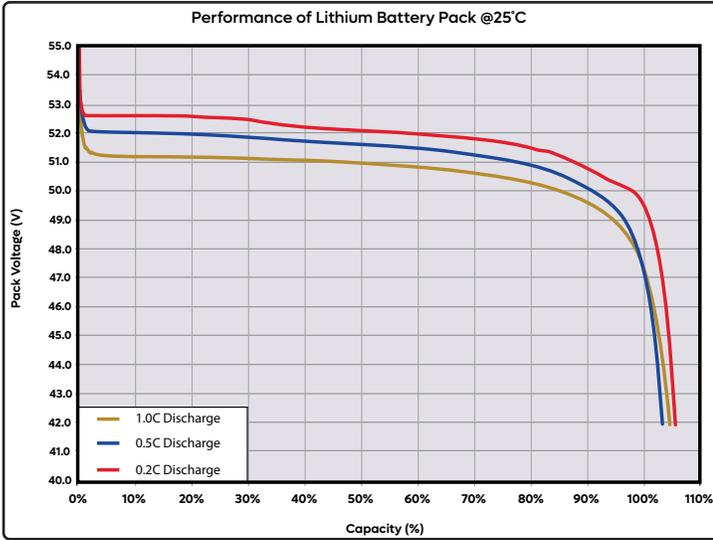
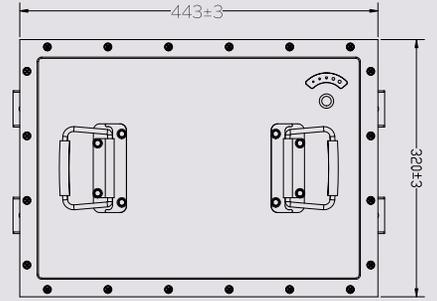
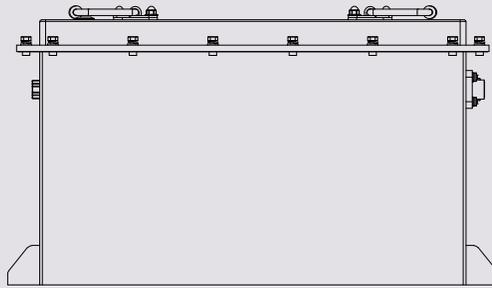
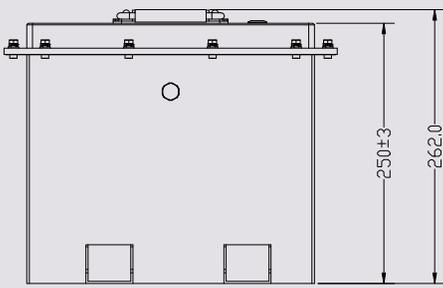
## OPERATIONAL SPECIFICATIONS

Discharging	Charging	Storage
-14°F~140°F (-10°C~60°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
UN/DoT 38.3	UN3480, Class 9	UL2580

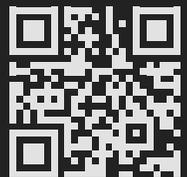




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