## 12V U1-50

U1LiFe™ Series | Technical Data Sheet





**Certified to global** safety standards



Fast charging within 3 hours



**Long shelf life performance** with shutdown mode



**Automotive grade cells** from top tier manufacturers



- Plug & play lead acid replacement
- UL2054 Shock & Vibration + Thermal Propagation Mitigation
- Compatible with many off-the-shelf chargers
- Increased life cycles up to 10X over sealed lead acid

<b>Electrical Specifications</b>	
Cell Chemistry	LiFePO4
Pack Voltage (Nom/Max)	12.8V / 14.4V
Pack Energy	670Wh (52.3Ah)*
Specific Energy	102Wh/kg
Continuous Power	256W / 20A
Recommended Charge CCCV	20A / 14.4V
Peak Power (<30sec)	358W (28A)
Cycle Life (Based on cell data @ 25°C)	3,000 @ 80% DoD

Compatible Inverters	
	HC150SL
Tripplite	HCINT150SL
	HC120DC
PowerVar	ABCE150

Operational Specifications		
Charge Temp	0°C to 40°C	
Discharge Temp	-20°C to 60°C	
Storage Temp	-40°C to 60°C	
Humidity (Operating)	20% to 80%	

Mechanical Specifications					
185mm 7.3"	209.7mm 8.3"				
BCI Size	U1				
Terminal Type (ISO)	M6				
Terminal Torque (Nm)	3.1 ± 0.3 Nm				
Weight	6.65kg (14.66lbs)				
Installation Orientation	Horizontal / Vertical				
Ingress Protection Rating	IP51				
Case Flammability Rating	Flame Retardant UL94 V-0				

Certifications				
	UL/CSA62133-2:20 UL2054	•	RoHS EMC	
•	IEC62133-2:2017	•	UN/DOT 38.3	

<sup>\*</sup>Usable capacity will depend on charge voltage, the depth of discharge, age, and other environmental conditions. Inventus Power reserves the right to make adjustments to this document at any time, without notice or obligation. All data in this publication is for reference use only. Models may vary from shown.

inventuspower.com | info@inventuspower.com | +1 877.423.4242

DS 12V-U1-50 2025 July V2.1

Market Applications







