

12V U1-40

U1LiFe™ Series | Technical Data Sheet

inVENTUS™
POWER



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**

Electrical Specifications

Cell Chemistry	LiFePO4
Pack Voltage (Nom/Max)	12.8V / 14.4V
Pack Energy	502Wh (39.2Ah)*
Specific Energy	86Wh/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

Tripplite	HC150SL 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



BCI Size	U1
Terminal Type (ISO)	M6
Terminal Torque (Nm)	3.1 ± 0.3 Nm
Weight	5.87kg (12.94lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP51
Case Flammability Rating	Flame Retardant UL94 V-0

Certifications

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

*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

TDS_12V-U1-40_2025_July V2.1

Market Applications



Medical Carts



E-Mobility



Industrial Carts



Request more info