

M-12V40-U1

U1LiFePRO™ Series | Data Sheet

inVENTUS
POWER



Automotive Grade Cells
from top tier manufacturers



Fast charging
within 2 hours



Long shelf life performance
with shutdown mode



Scalable to increase runtime



Designed &
Engineered in
the **USA**

- Supports regenerative braking
- Soft Start Control (System Pre-charge)
- Patented Virtual BMS with Advanced Module Balancing Technology
- Universal Communication Protocol (CANopen/RS485)
- UL2054 Shock & Vibration + Thermal Propagation Mitigation
- Compatible with many off-the-shelf chargers

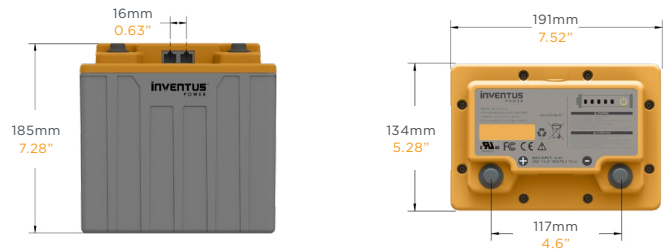
Electrical Specifications

Cell Chemistry	LiFePO4
Pack Voltage (Nom/Max)	12.8V / 14.4V
Pack Energy	512Wh (40Ah)
Specific Energy	79Wh/kg
Continuous Power	0.51kW / 40A
Recommended Charge CCCV	20A / 14V
Peak Power (<10sec)	1.02kW (80A)
Cycle Life (@ 25°C)	3,000 @ 80% DoD
Scalability	Up to 10 packs in parallel

Operational Specifications

Charge Temp	0°C to 55°C
Discharge Temp	-20°C to 60°C
Storage Temp	-20°C to 60°C
Humidity (Operating)	5% to 95%
Humidity (Storage)	<70%

Mechanical Specifications



BCI Size	U1
Terminal Type (ISO)	M6
Terminal Torque (Nm)	3.4 ± 0.5 Nm
Weight	6.5kg (14.3lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP56
Case Flammability Rating	Flame Retardant UL94 V-0

Certifications

- UL1642 (Cell)
- UL2054 (Pack)
- IEC62133 (Cell/Pack)
- FCC Class B
- CE
- UN38.3

NOTE: Please contact info@inventuspower.com to obtain the U1LiFePRO™ User Guide for proper installation and handling.

Market Applications



Professional
Cleaning



Medical Carts



E-Mobility



Emergency
Lighting



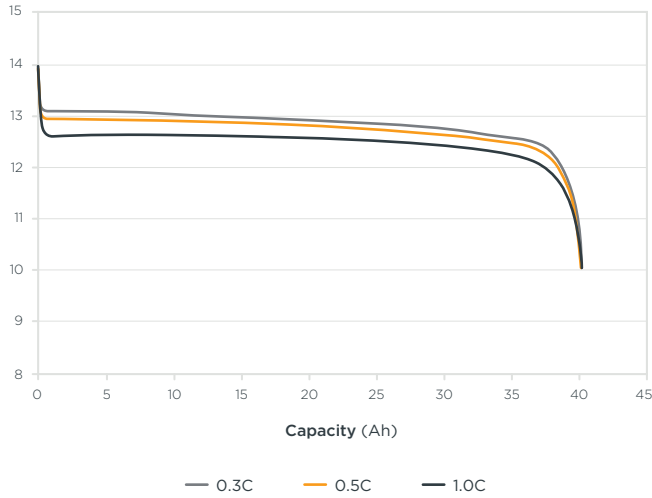
Robotics



Renewables &
Energy Storage

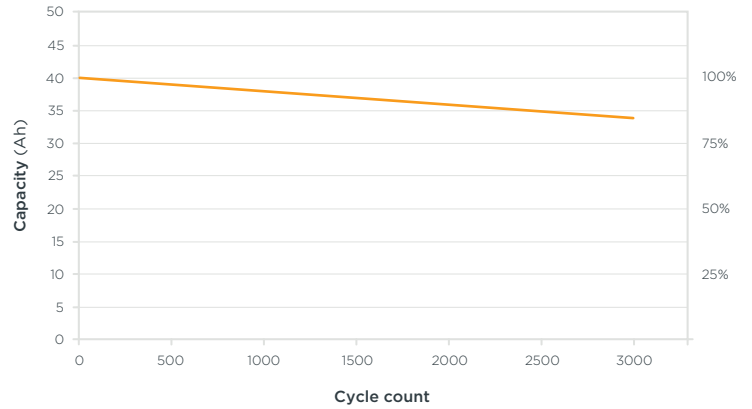
Capacity vs. Discharge Rate

Test condition: Ambient Temperature



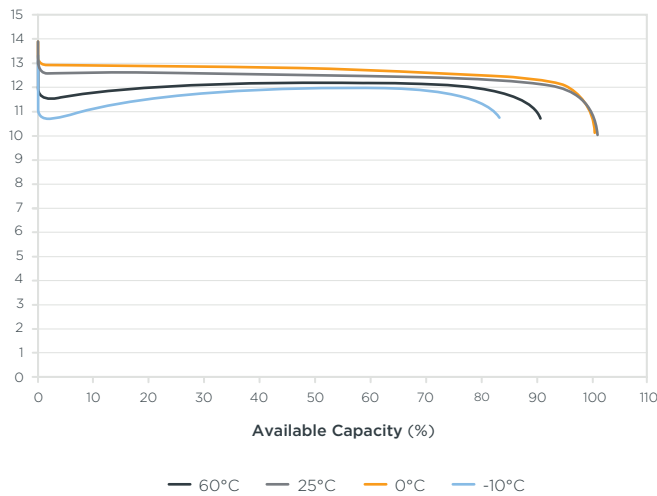
Cycle Life

Charge 1C, discharge 1C at 25°C



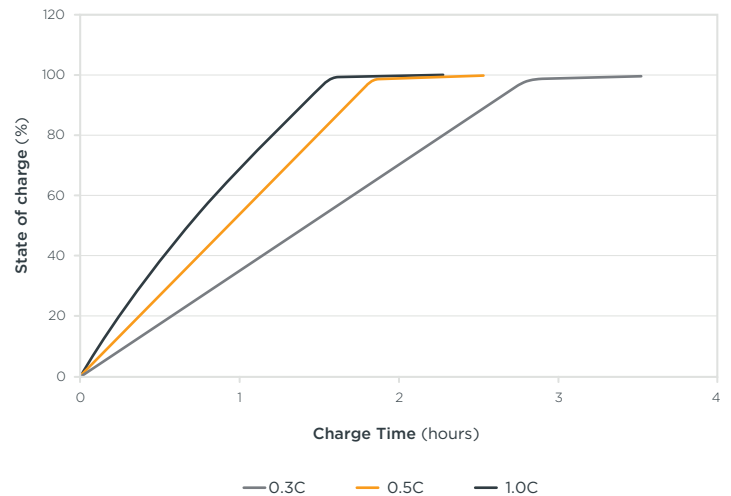
Voltage and Capacity vs. Temperature

Discharge current: 1.0C



Charging Performance

Test condition: Ambient Temperature



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.



Request more Information

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