

# M-24V20-U1

U1LiFePRO™ Series | Data Sheet

**inventus**<sup>™</sup>  
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**

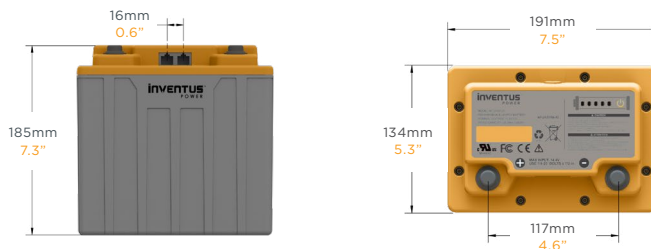
## Electrical Specifications

Cell Chemistry	LiFePO4
Pack Voltage (Nom/Max)	25.6V / 28V
Pack Energy	512Wh (20Ah)
Specific Energy	79Wh/kg
Continuous Power	0.77kW / 30A
Recommended Charge CCCV	10A / 28V
Peak Power (<10sec)	1.54kW (60A)
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	5.7kg (12.4lbs)
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](mailto:info@inventuspower.com) to obtain the U1LiFePRO™ User Guide for proper installation and handling.

## Market Applications



Professional  
Cleaning



Medical Carts



E-Mobility



Material Handling



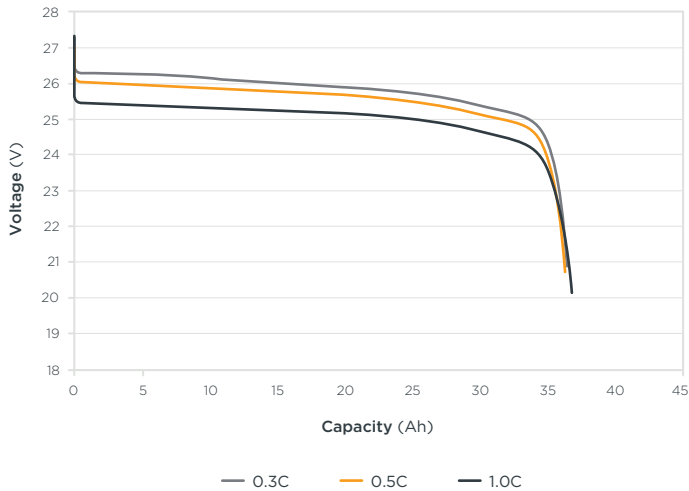
Robotics



Renewables &  
Energy Storage

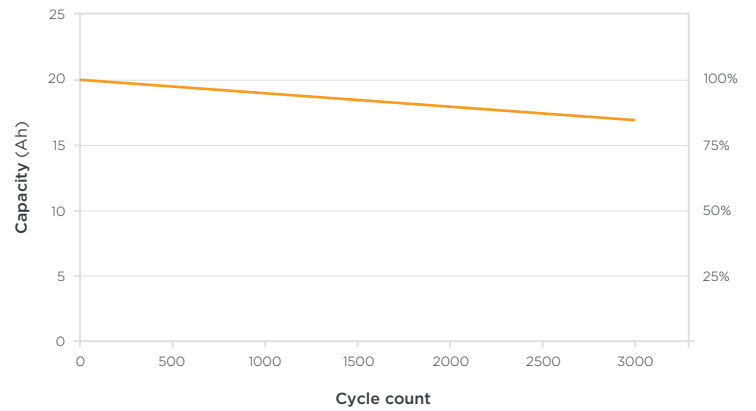
### Capacity vs. Discharge Rate

Test condition: Ambient Temperature



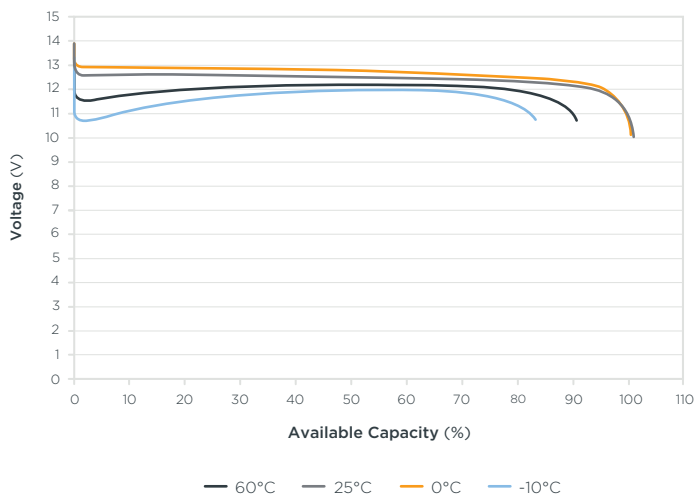
### Cycle Life @ 80% DoD

Charge 0.5C, discharge 1C at 25°C



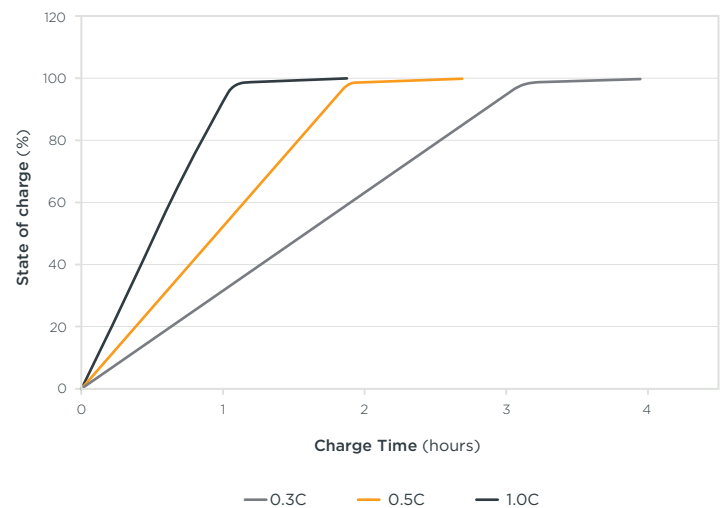
### Voltage and Capacity vs. Temperature

Discharge current: 1.0C



### Charging Performance

Test condition: Ambient Temperature



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Request  
more Information

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