

# M-24V80-TRX

PROTRXion™ Series | Data Sheet

**inventus™**  
POWER



**Automotive grade cells**  
from top tier manufacturers



**Fast charging**  
within 2 hours



**Long shelf life performance**  
with shutdown mode



**Cold temperature functionality**  
(-35°C) with optional integrated heater



**BMS certified to functional safety standard UL/IEC 60730-1**



- **Supports regenerative braking**
- **Soft start control** (System pre-charge)
- **Patented virtual BMS** with Advanced Module Balancing Technology
- **Universal Communication Protocol** (CANopen/J1939)
- **UL2271 Shock & Vibration + Thermal Propagation Mitigation**
- **Compatible with many off-the-shelf chargers**

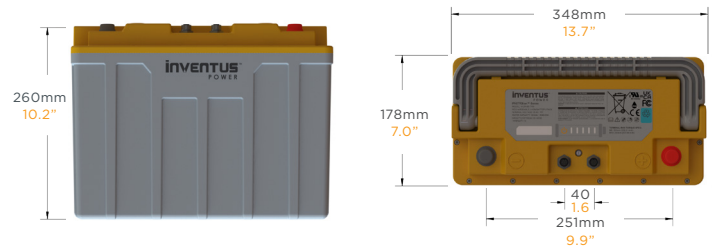
## Electrical Specifications

Cell Chemistry	LiFePO4
Pack Voltage (Nom/Max)	25.6V / 28.0V
Pack Energy	2.05kWh (80Ah)
Specific Energy	113Wh/kg
Continuous Power	3.84kW (150A)
Recommended Charge CCCV	40A / 28.0V
Peak Power (<10sec)	5.12kW (200A)
Cycle Life (@ 25°C)	3,000 @ 80% DoD
Scalability	Up to 15 packs in parallel

## Operational Specifications

Charge Temp	0°C to 55°C -35°C to 55°C (w/ heater)
Discharge Temp	-20°C to 55°C -35°C to 55°C (w/ heater)
Storage Temp	-20°C to 60°C
Humidity (Operating)	5% to 95%
Humidity (Storage)	<70%

## Mechanical Specifications



BCI Size	Group 5D
Terminal Type (ISO)	M8 (Neg), M10 (Pos)
Terminal Torque (Nm)	17 ± 1 (Neg), 22 ± 1 (Pos)
Weight	18.2kg (40.1lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP67*
Case Flammability Rating	Flame Retardant UL94 V-0

## Certifications

- UL1642 (Cell)
- UL2271 (Pack)
- IEC62133 (Cell/Pack)
- IEC62619
- FCC Class B
- CE
- UN38.3

\*IP65 if communication ports left unmated

## Market Applications



Professional Cleaning



Light Electric Vehicle



Aerial Work Platform



Material Handling



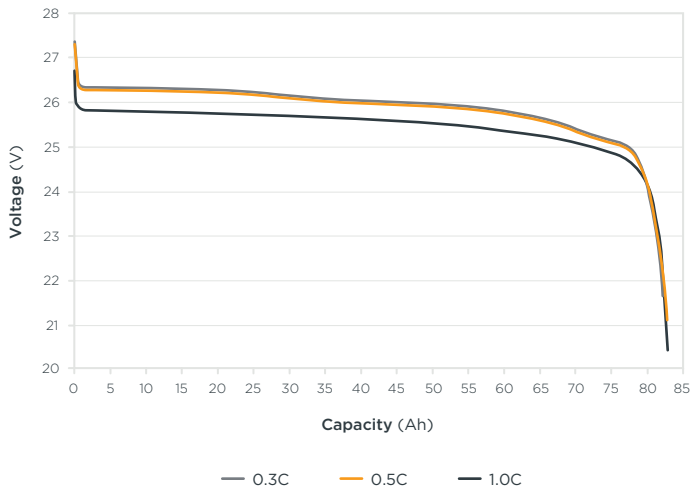
Robotics



Renewables & Energy Storage

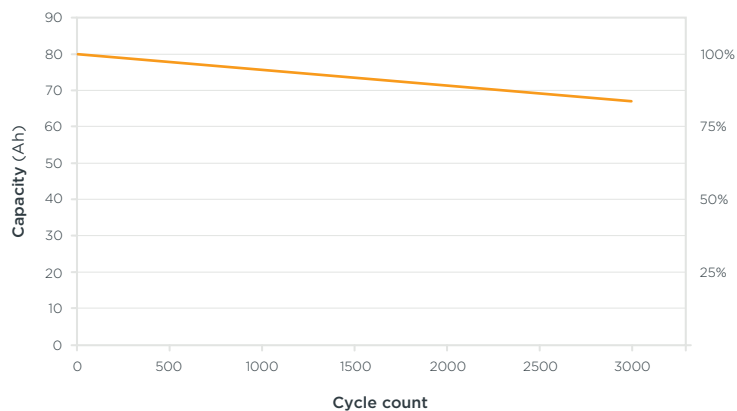
### Capacity vs. Discharge Rate

Test condition: Ambient Temperature



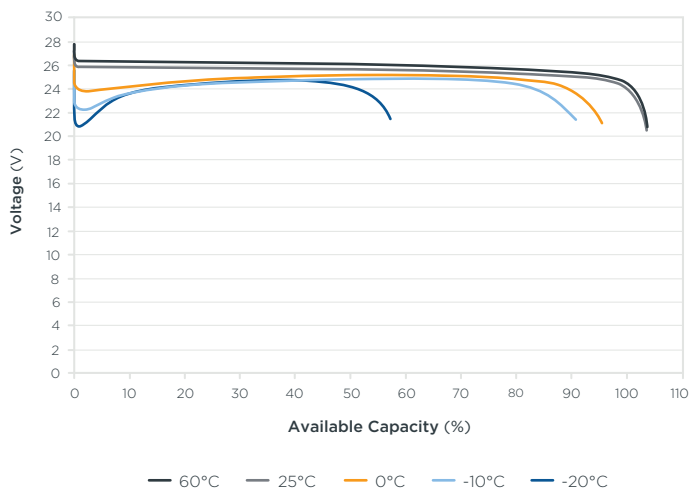
### Cycle Life @ 80% DoD

Charge 0.5C, discharge 1C at 25°C



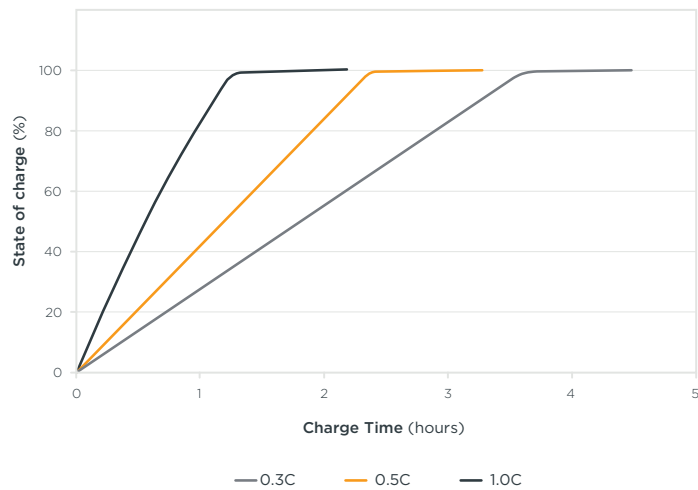
### Voltage and Capacity vs. Temperature

Discharge current: 1.0C



### Charging Performance

Test condition: Ambient Temperature



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Request more information

[inventuspower.com](http://inventuspower.com) | [info@inventuspower.com](mailto:info@inventuspower.com) | +1 877.423.4242