

# M-36V80-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)
- **UL2580** Shock &  
Vibration + Thermal  
Propagation Mitigation
- **Compatible with many  
off-the-shelf chargers**

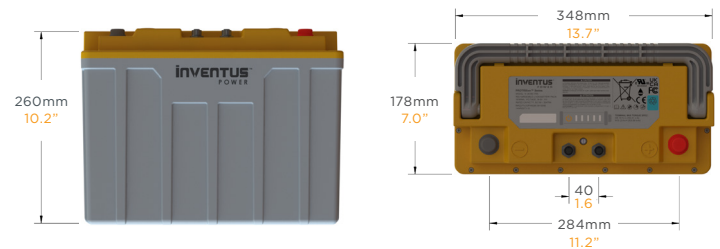
## Electrical Specifications

Cell Chemistry	Nickel Cobalt Manganese
Pack Voltage (Nom/Max)	36.9V / 41.0V
Pack Energy	3.05kWh (84Ah)
Specific Energy	158Wh/kg
Continuous Power	3.0kW (80A)
Recommended Charge CCCV	26.4A / 41.0V
Peak Power (<10sec)	5.8kW (160A)
Cycle Life (@ 25°C)	2,000 @ 80% DoD
Scalability	Up to 15 packs in parallel

## Operational Specifications

Charge Temp	0°C to 45°C -35°C to 45°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	19.3kg (42.5lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP67*
Case Flammability Rating	Flame Retardant UL94 V-0

## Certifications

- UL2580 (Cell)
- UL2271 (Pack)
- IEC62133 (Cell/Pack)
- IEC62619
- FCC Class B
- CE
- UN38.3

\*IP65 when communication ports left unmated

## Market Applications



Professional  
Cleaning



Light Electric  
Vehicle



Aerial Work Platform



Material Handling



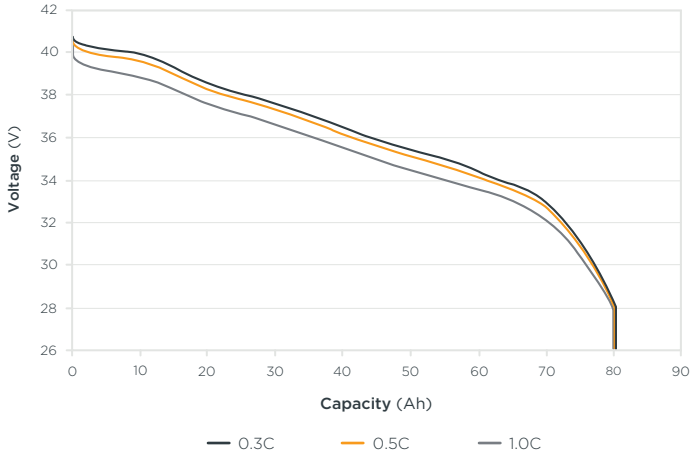
Robotics



Renewables &  
Energy Storage

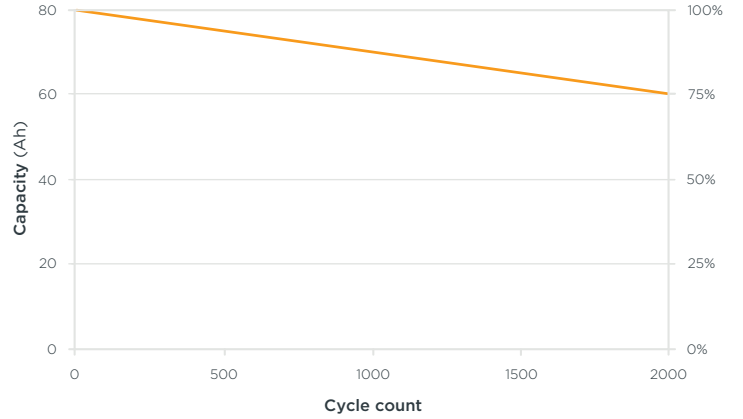
## Capacity vs. Discharge Rate

Test condition: Ambient Temperature



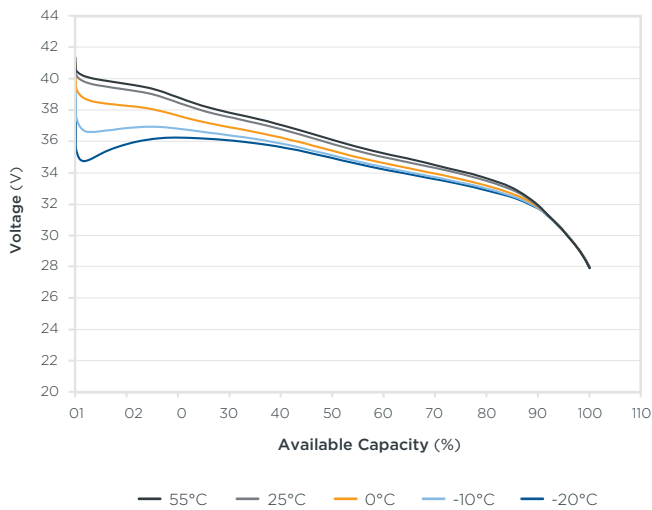
## Cycle Life @ 80% DoD

Charge 0.3C, discharge 1C at 25°C



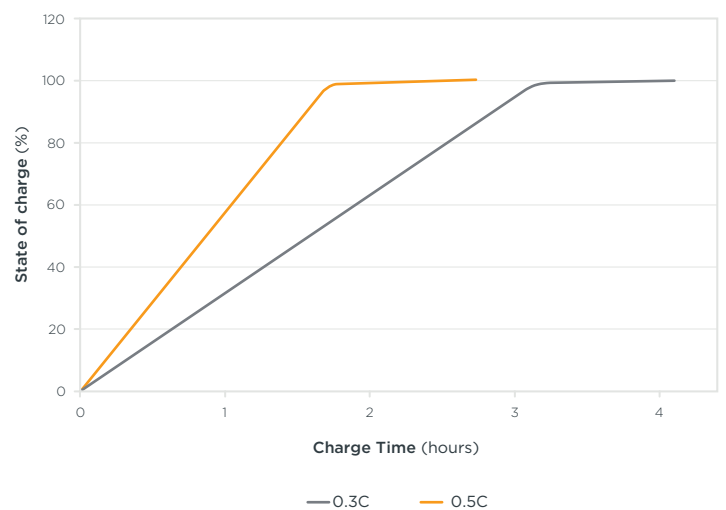
## Voltage and Capacity vs. Temperature

Discharge current: 1.0C



## Charging Performance

Test condition: Ambient Temperature



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Request  
more Information

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