

M-48V60-TRX

PROTRXion™ Series | Data Sheet

inVENTUS[™]
POWER



Automotive Grade Cells
from top tier manufacturers



Fast charging
within 3 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



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/J1939)
- **UL2580** Shock & Vibration + Thermal Propagation Mitigation
- **Compatible with many off-the-shelf chargers**

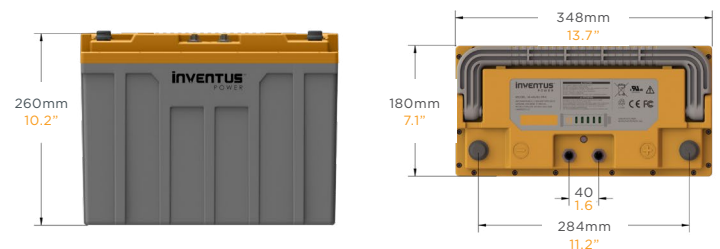
Electrical Specifications

Cell Chemistry	Nickel Cobalt Manganese
Pack Voltage (Nom/Max)	50.8V / 58V
Pack Energy	3.1kWh (60Ah)
Specific Energy	165Wh/kg
Continuous Power	3.1kW (60A)
Recommended Charge CCCV	20A / 58V
Peak Power (<10sec)	7.1kW (140A)
Cycle Life (@ 25°C)	2,000 @ 80% DoD
Scalability	Up to 10 packs in parallel

Operational Specifications

Charge Temp	0°C to 45°C -20°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	18.8kg (41.4lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP65 (IP67 when mated)
Case Flammability Rating	Flame Retardant UL94 V-0

Certifications

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

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

Market Applications



Professional
Cleaning



Light Electric
Vehicle



Aerial Work Platform



Material Handling



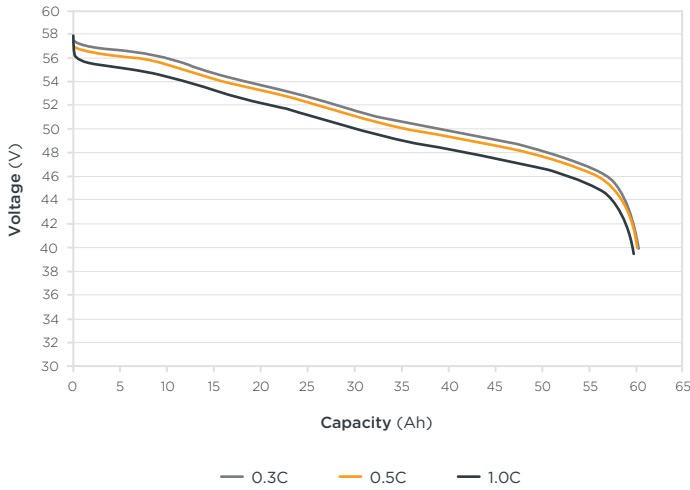
Robotics



Renewables &
Energy Storage

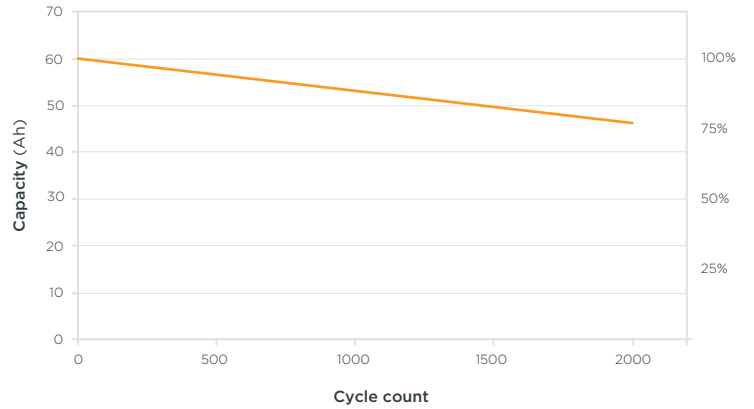
Capacity vs. Discharge Rate

Test condition: Ambient Temperature



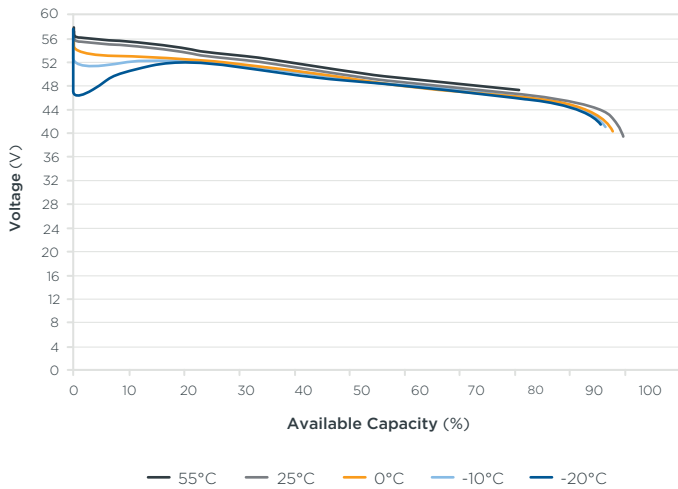
Cycle Life @ 80% DoD

Charge 0.3C, discharge 1C at 25°C



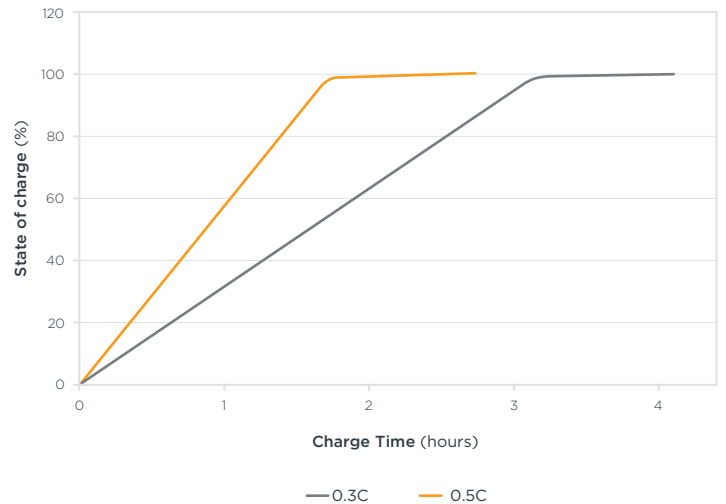
Voltage and Capacity vs. Temperature

Discharge current: 1.0C



Charging Performance

Test condition: Ambient Temperature



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Request more information

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