

M-48V60-TRX

PROTRXion™ Series | Technical 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



Certified to ECE R100/R10
for EU on-road electric vehicle applications*



- **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

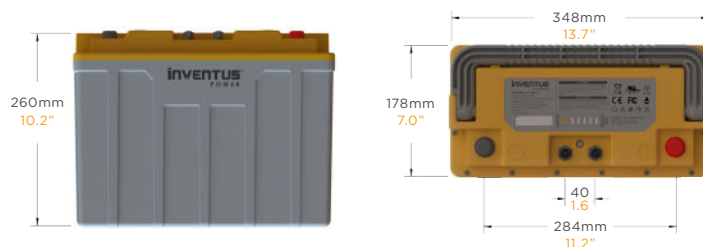
Cell Chemistry	Nickel Cobalt Manganese
Pack Voltage (Nom/Max)	51.7V / 58.1V
Pack Energy	3.2kWh (62Ah)
Specific Energy	169Wh/kg
Continuous Power	3.1kW (60A)
Recommended Charge CCCV	20A / 58.1V
Peak Power (<10sec)	7.24kW (140A)
Cycle Life (@ 25°C)	2,000 @ 80% DoD
Scalability	Up to 10 packs in parallel

Operational Specifications

Charge Temp	0°C to 45°C -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%

*On 9092 models only

Mechanical Specifications



BCI Size	Custom
Terminal Type (ISO)	M8 (Neg), M10 (Pos)
Terminal Torque (Nm)	17 ± 1 (Neg), 22 ± 1 (Pos)
Weight	19.0kg (41.9lbs)
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
- IEC60730 Class B
- FCC Class B
- CE
- UN38.3
- ECE R100
- ECE R10

Market Applications



Light Electric Vehicle



Aerial Work Platform



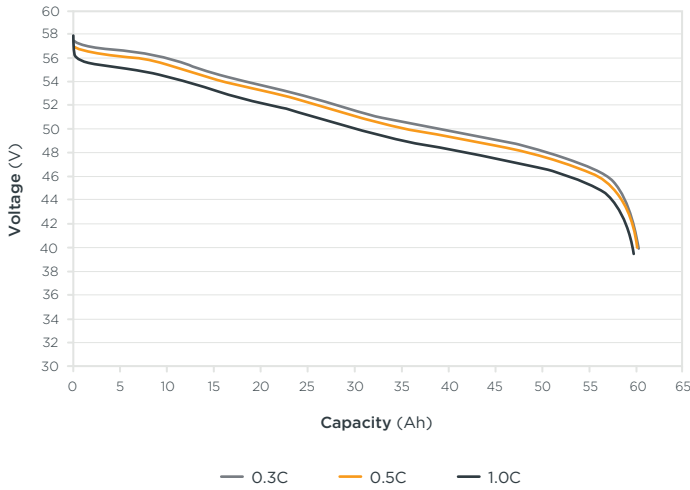
Material Handling



Robotics

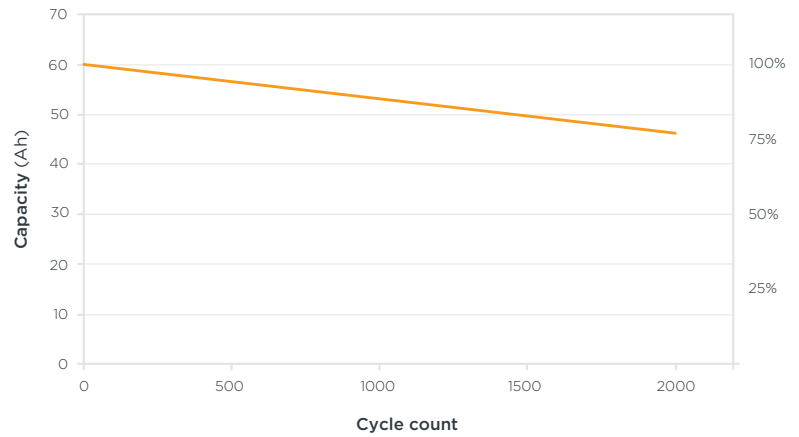
Capacity vs. Discharge Rate

Test condition: Ambient Temperature



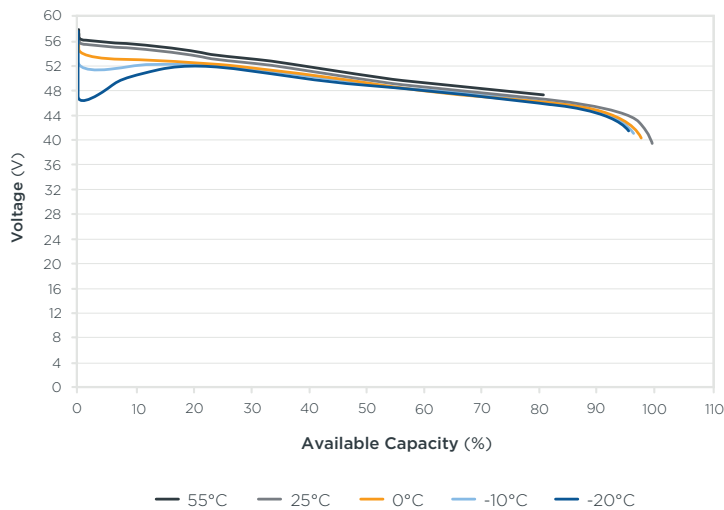
Cycle Life @ 80% DoD

Charge 0.3C, discharge 1C at 25°C



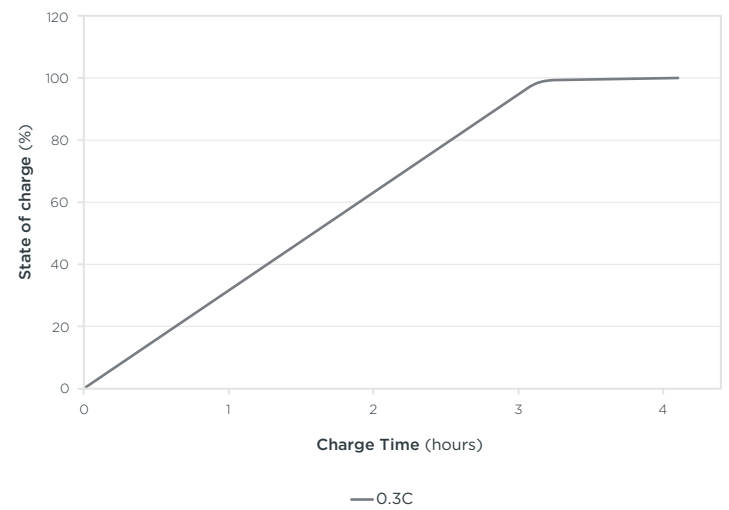
Voltage and Capacity vs. Temperature

Discharge current: 1.0C



Charging Performance

Test condition: Ambient Temperature



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