

# S-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



**Scalable to increase runtime**



- **Designed to replace lead-acid batteries** (terminals always on)
- **Surge protection** for regenerative braking
- **Patented virtual BMS** with Advanced Module Balancing Technology
- **UL2271** Shock & Vibration + Thermal Propagation Mitigation
- **Compatible with many off-the-shelf chargers**

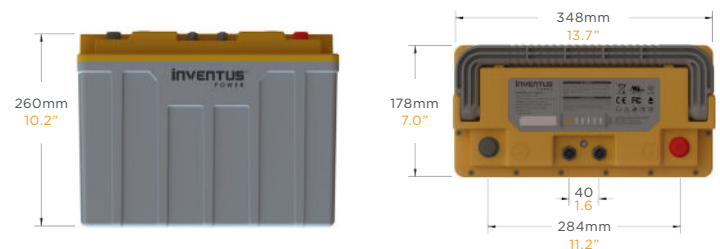
## Electrical Specifications

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)	8.1kW (157A)
Cycle Life (@ 25°C)	2,000 @ 80% DoD
Scalability	Up to 6 packs in parallel

## Operational Specifications

Charge Temp	0°C to 45°C
Discharge Temp	-20°C to 55°C
Storage Temp	-20°C to 60°C
Humidity (Operating)	5% to 95%
Humidity (Storage)	<70%

## 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
- FCC Class B
- CE
- UN38.3

## Market Applications



Light Electric Vehicle



Aerial Work Platform



Material Handling



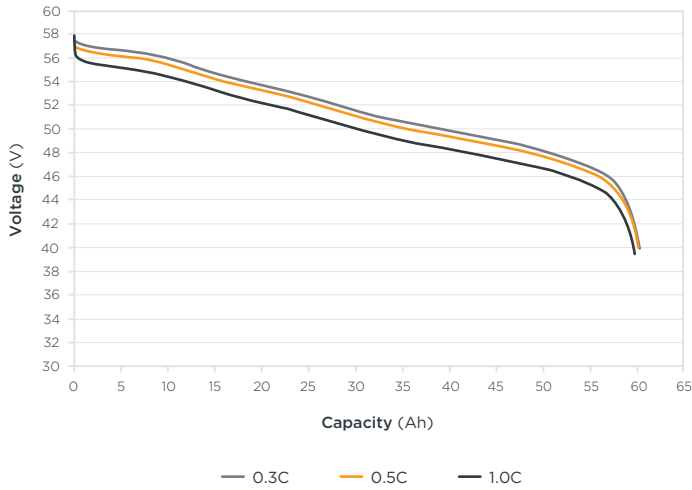
Robotics

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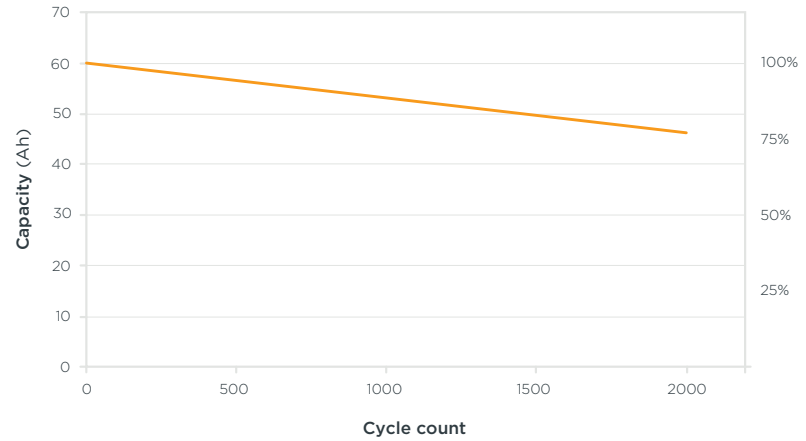
## Capacity vs. Discharge Rate

Test condition: Ambient Temperature



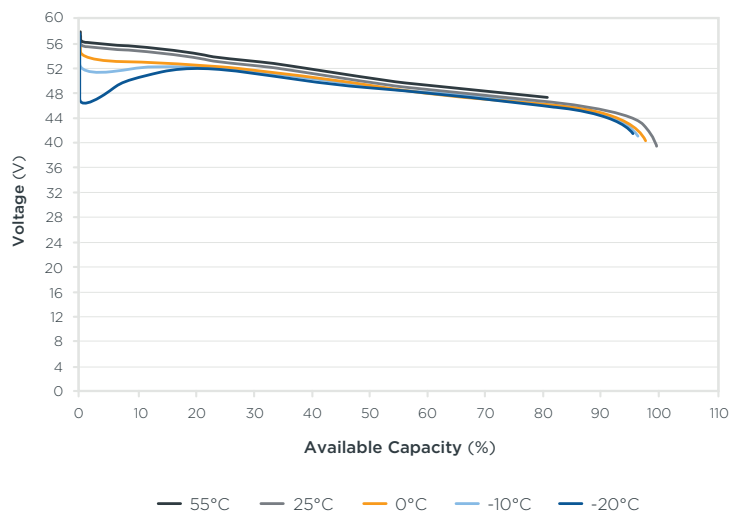
## Cycle Life @ 80% DoD

Charge 0.3C, discharge 1C at 25°C



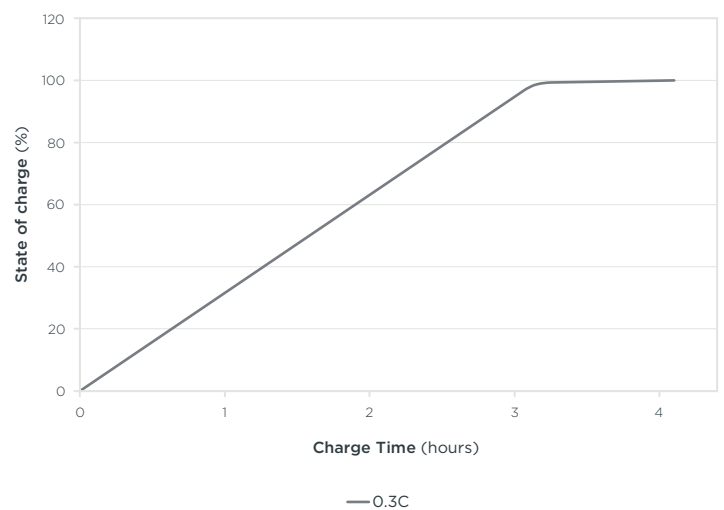
## Voltage and Capacity vs. Temperature

Discharge current: 1.0C



## Charging Performance

Test condition: Ambient Temperature



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Request  
more Information

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