

M-36V80-TRX

PROTRXion™ Series | Technical 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**

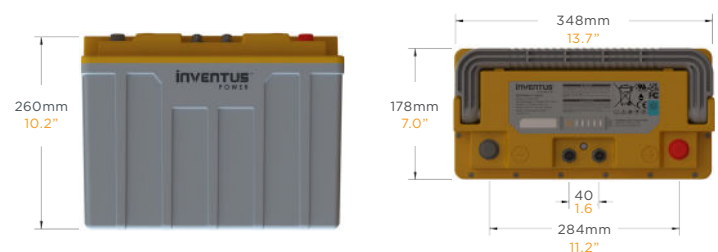
Electrical Specifications

| | |
|-------------------------|----------------------------|
| Cell Chemistry | Nickel Cobalt Manganese |
| Pack Voltage (Nom/Max) | 36.9V / 41.0V |
| Pack Energy (Rated) | 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

**J1939 communication protocol in development for this battery

Market Applications



Professional
Cleaning



Light Electric
Vehicle



Aerial Work Platform



Material Handling



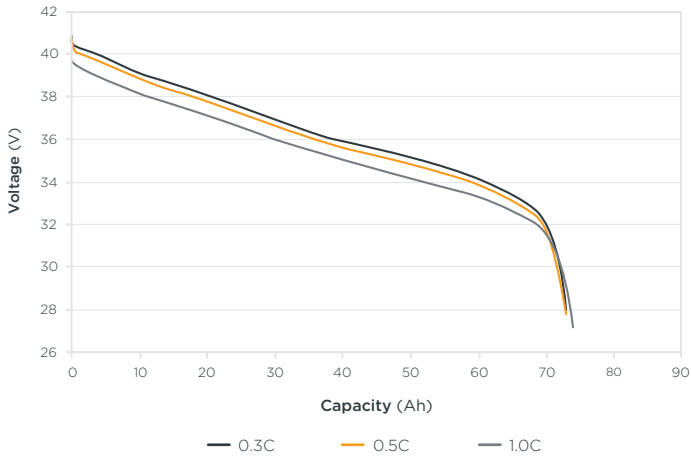
Robotics



Renewables &
Energy Storage

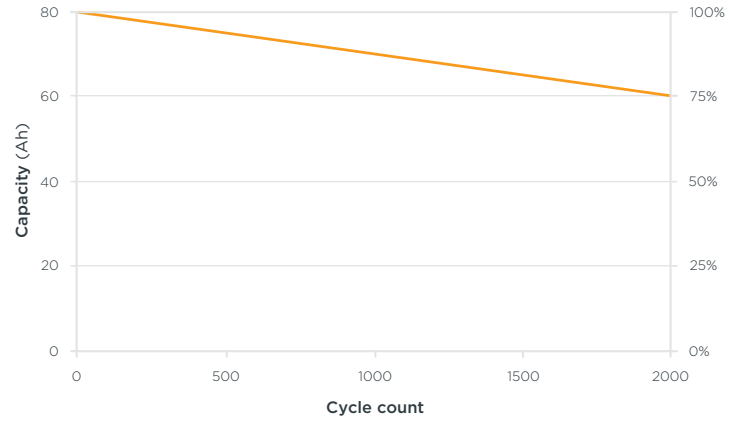
Capacity vs. Discharge Rate

Test condition: Ambient Temperature



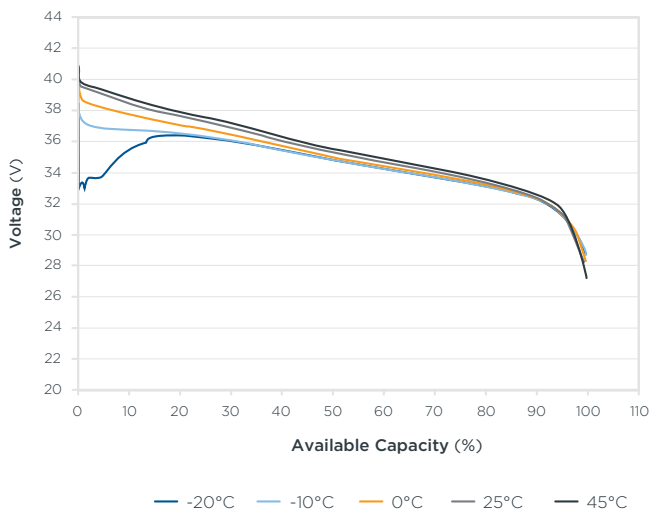
Cycle Life @ 80% DoD

Charge 0.3C, discharge 1C at 25°C



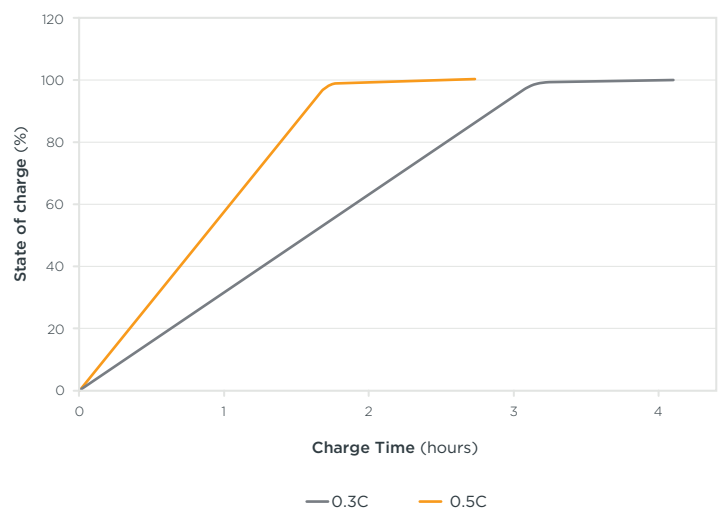
Voltage and Capacity vs. Temperature

Discharge current: 1.0C



Charging Performance

Test condition: Ambient Temperature



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**Request
more Information**

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