

# M-24V80-TRX

PROTRXion Series | Data Sheet

**inVENTUS**<sup>™</sup>  
POWER

## Key Benefits

- Fast charging within 3hrs to increase productivity
- Long shelf life performance with shutdown mode
- Cold temperature functionality (-30°C) with optional integrated heater
- System fault mitigation protection
- CANopen / J1939 communication
- Compatible with many off-the-shelf industrial chargers



Designed & Engineered in the **USA**

## Market Applications



Professional Cleaning



Material Handling



Aerial Work Platform



Robotics



Light Electric Vehicle



Renewables & Energy Storage

### Electrical Specifications

Pack Voltage (Nom/Max)	25.6V / 28V
Pack Energy	2.05kWh (80Ah)
Specific Energy	114Wh/kg
Continuous Power	3.84kW (150A)
Recommended Charge CCCV	40A / 28V
Peak Power (<30secs)	5.12kW (200A)
Cycle Life (@ 25°C)	3,000 @ 80% DoD
Scalability	Up to 15 packs in parallel

### Mechanical Specifications

BCI Size	Group 5D
Model	M-24V80-TRX
Cell Chemistry	LiFePO4
Terminal Type (ISO)	M8 (Neg), M10 (Pos)
Dimensions (LxWxH)	348mm x 178mm x 260mm (13.7" x 7.00" x 10.24")
Weight	18kg (40lbs)
Installation Orientation	Horizontal / Vertical
Ingress Protection Rating	IP65
Case Flammability Rating	Flame Retardant UL94 V-0

### Operational Specifications

Charge Temp	0°C to 45°C -20°C to 45°C (w/ heater)
Discharge Temp	-20°C to 55°C -30°C to 55°C (w/ heater)
Storage Temp	-20°C to 45°C
Humidity (Operating)	5% to 95%
Humidity (Storage)	<70%

NOTE: Please contact [info@inventuspower.com](mailto:info@inventuspower.com) to obtain the PROTRXion User Guide for proper installation and handling.

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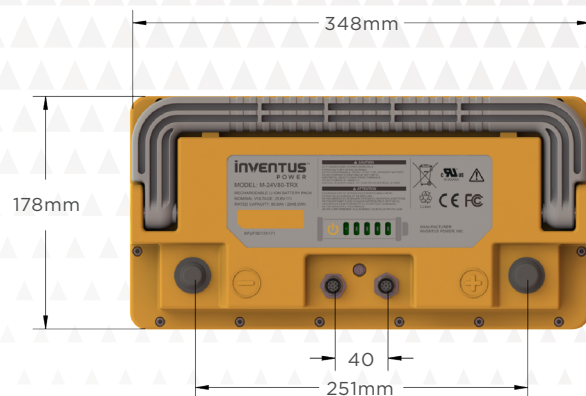
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- Reverse polarity & short circuit protection
- BMS certified to functional safety standard UL/IEC 60730-1
- Advanced cell & pack module balancing
- Easy system integration (automated master/slave detection)
- Battery LED state of charge indicator
- Configurable communication speed from 125kbps up to 1Mbps

- UL1642 (Cell)
- UL2271 (Pack)
- IEC62133 (Cell/Pack)
- IEC62619
- FCC Class B
- CE
- UN38.3



Technical drawing of the M12 connector showing front and side views with dimensions.

**Front View Dimensions:**

- Overall width: SW18
- Overall height: 13.5
- Pin labels: PIN 1, PIN 2, PIN 3, PIN 4, PIN 5, PIN 6, PIN 7, PIN 8

**Side View Dimensions:**

- Overall length: 20.0
- Length from front face to start of pin insulation: 17.2
- Length of pin insulation: 2.8
- Length of contact sleeve: 3.5
- Overall height: PG9
- Inner diameter of contact sleeve:  $\varnothing 13.3$
- Inner diameter of contact sleeve (at pin): M12x1
- Pin diameter:  $\varnothing 0.9$
- Pin length: 1.3

**Labels:**

- 1: Pin insulation
- 2: Contact sleeve
- 3: Contact sleeve
- 4: Pin
- 5: Pin

**Text:**

M12, MALE, 8POLES

Pin #	Symbol	Description
1	VCANH	CAN High (System)
2	VCANL	CAN Low (System)
3	VWAKE	Wake up input for discharging
4	VGND	Ground reference
5	VINTLK	Interlock input for charging
6	VCANH_BATT	CAN High (Battery)
7	VCANL_BATT	CAN Low (Battery)
8	VSUPPLY_24V	Unregulated 24V output