



PRODUCT OVERVIEW

The EV-TE Series has a Built in Smart Battery Management System with multiple protections beyond controlling the basic charge and discharge protection. Includes 2 automotive grade temperature sensors across 12 voltage acquisition lines and 3 different communication methods to meet the needs of the majority of users. Plug and play, maintenance free and designed for a 20 year life.

FEATURES

- High/low temperature protection
- Over charge/discharge protection
- Built in cell balance functions
- Charge/discharge customization available
- Built in CAN/RS232/RS485 communication
- Supports up to 15 modules in parallel
- Built in Smart BMS with multiple protections
- 20 year design life, 10 year warranty
- Built in Smart LED Screen and setting button
- IP65 weather protection
- Chargeable by grid, solar or wind turbine
- Compatible with the vast majority of popular inverters

APPLICATIONS

- Emergency power supply
- Home backup storage
- Telecommunications backup power
- Data storage/UPS backup power
- Off-grid power
- Solar power storage

Product Description

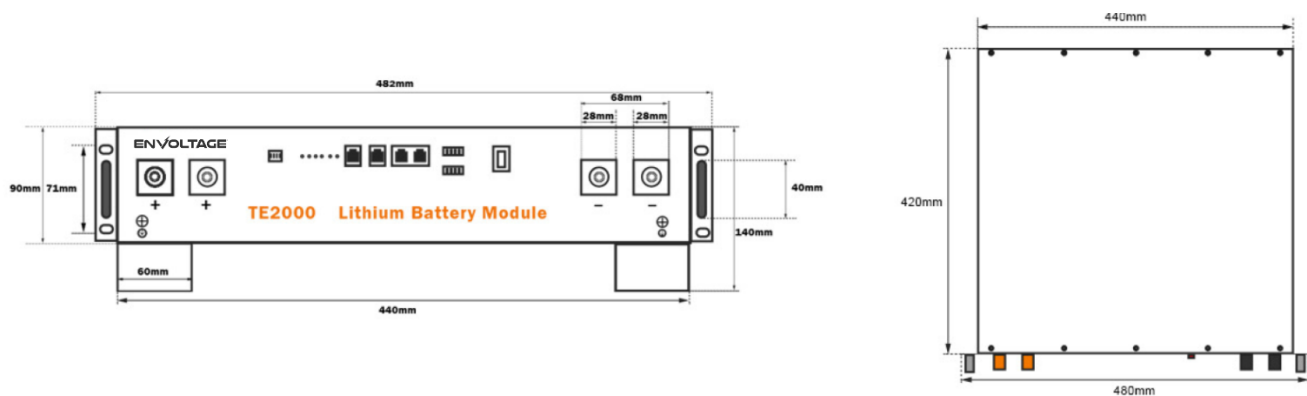
PART#	DESCRIPTION	VOLTAGE	CAPACITY	OUTPUT	CHARGING CURRENT
EV-TE-2000	50Ah 48v LiFePO4 Battery	48V	2.4kWh	50Ah	25A

Specifications

MODEL#		EV-TE-2000
ELECTRICAL SPECIFICATIONS		
Nominal Voltage		48V
Nominal Capacity		50Ah
Capacity @ 20A		150min
Energy		2400Wh
Resistance		$\leq 30\text{m}\Omega$ @ 50% SOC
Efficiency		99%
Self-Discharge		$\leq 3.5\%$ per month
Maximum Modules in Parallel		15
DISCHARGE SPECIFICATIONS		
Max Continuous Discharge Current		50A
Peak Discharge Current		$100\text{A} \leq 3\text{s}$
BMS Discharge Current Cutoff		$130\text{A} \pm 20\text{A}$ ($90 \pm 10\text{ms}$)
Recommended Low Voltage Disconnect		42V
BMS Discharge Voltage Cutoff		42V ($2.8 \pm 0.08 \text{ vpc}$) / ($100 \pm 50\text{ms}$)
Reconnect Voltage		45V ($3.0 \pm 0.1 \text{ vpc}$)
Short Circuit Protection		$200\text{-}350\mu\text{s}$
TEMPERATURE SPECIFICATIONS		
Discharge Temperature		-4°F to 140°F
Charge Temperature		32°F to 113°F
Storage Temperature		23°F to 95°F
BMS High Temperature Cutoff Discharge		149°F
Reconnect Temperature		122°F
Low Temperature Cutoff Charge		32°F
High Temperature Cutoff Charge		129.2°F
MECHANICAL SPECIFICATIONS		
Dimensions (L*W*H)		$482*420*90\text{mm}$
Weight		25.5KG
Terminal Type		Connector
Case Material		Steel
Enclosure Protection		IP20
Cell Type		Prismatic
Chemistry		LiFePO4
Configuration		15S1P
CHARGE SPECIFICATIONS		
Recommended Charge Current		25A
Maximum Charge Current		30A
Recommended Charge Voltage		52.5-54V

MODEL#	EV-TE-2000
BMS Charge Voltage Cutoff	54V (3.7%±0.1V)
Reconnect Voltage	51.8V (3.45±0.1V)
Balancing Voltage	52.5V (3.5±0.025vpc)
Balancing Current	35±5mA
COMPLIANCE SPECIFICATIONS	
Certifications	CE (battery) Un38.3 (Battery) IEC62133 (cell)
Communication	RS232, RS485, CAN
Shipping Classification	UN3480, CLASS9

Dimensions



Product Images



Optional Cabinet



50Ah Module Front



50Ah Module Back