



VTL12-100 (12V100Ah)

VTL SERIES LiFePO4 Battery

VTL Series Introduction

VTL Series Lithium Batteries are designed for high-demand applications, including RVs, marine, solar systems, electric golf carts, and other environments where reliable, high-performance power is essential. Lithium iron phosphate technology (LiFePO₄) offers a safe and lightweight solution, providing higher efficiency and longer lifespan compared to traditional lead-based batteries. Our BMS allows for the highest performance range while protecting the battery with multiple safety features. Connect to the Valiant One App to access real-time battery monitoring, performance insights, and everything you need to get the most out of your Valiant battery.

Long
Life

Lithium Iron
Phosphate

Deep
Cycle



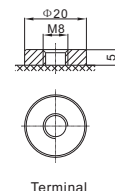
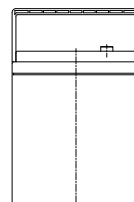
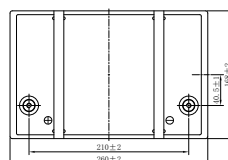
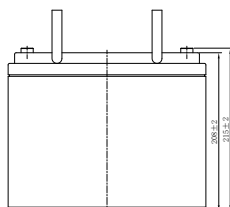
Applications

- RV
- Marine
- Solar/Wind Systems
- Electric Golf Cart
- Scissor Lifts

Dimensions & Weight



Bluetooth



Terminal

Technical Specifications

- Length: 260 ±1mm Width: 168 ±1mm Height: 208 ±1mm Total Height: 215 ±1mm
- Weight: 10.5 ±0.1kgs

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	100Ah
	Energy	1280Wh
	Terminal	M8
	Lab Tested Cycle Life	>6000 cycles 80%DOD
	Estimated Real World Cycles	>4500 cycles
	Months Self Discharge	<3%
	Efficiency of Charge	100% @ 0.2C
	Efficiency of Discharge	96~99% @ 0.5C
Standard Charge	Charge Voltage	14.6V ± 0.2
	Recommended Charge Current	20A
	Max. Charge Current	100A
	Charge Cut-off Voltage	14.6V ± 0.2
Standard Discharge	Continuous Current	50A
	Max continuous discharge current	100A
	Discharge Cut-off Voltage	10V
Environmental	Charge Temperature	0 °C to 45 °C (32F to 113F) @ 60 ± 25% Relative Humidity
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @ 60 ± 25% Relative Humidity
	Storage Temperature	0 °C to 40 °C (32F to 104F) @ 60 ± 25% Relative Humidity
	Water Dust Resistance	IP21
Mechanical	Cell & Method	Prismatic Cell, 4S1P
	Case	ABS
	Dimensions (in./mm.)	260*168*208*215mm/10.24*6.62*8.19*8.47Ins
	Weight (lbs./kg.)	Approx: 10.5kgs/23.15lbs
	Gravimetric specific energy	121.90WH/KG
	Bluetooth	YES
	LCD display	YES
	Heating function (optional)	NO

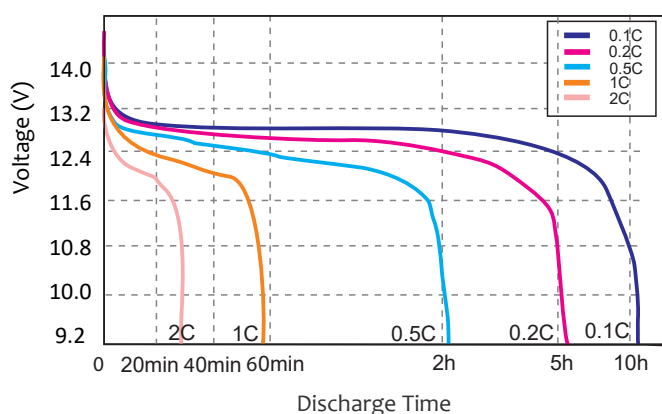


BMS Specifications

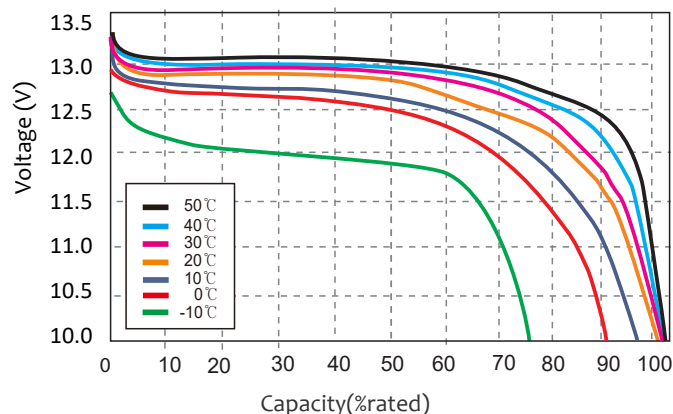
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Performance Characteristics (Data test from 4 Series Cell)

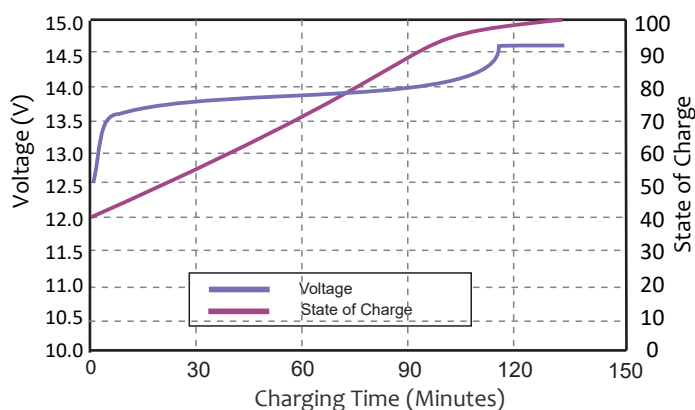
Different Rate Discharge Curve (25°C)



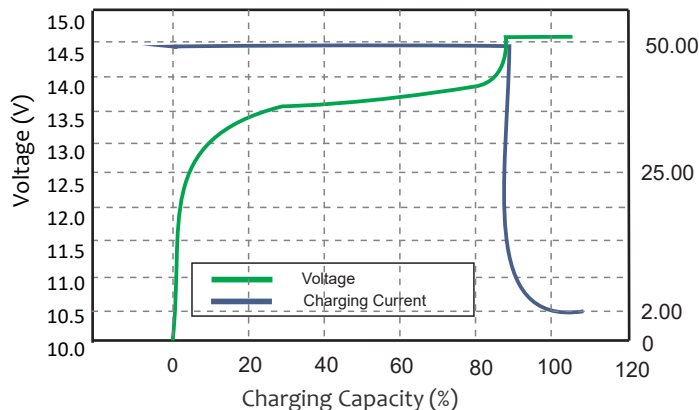
Different Temperature Discharge Curve At 0.5c



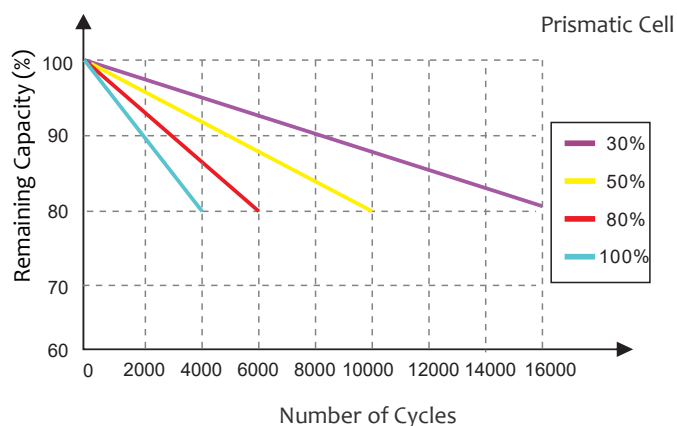
State Of Charge Curve At 0.5c (25°C)



Charging Characteristics At 0.5c (25°C)



Cycle Life Curve At 1c According DoD



Self Discharge Characteristics Curve

