BATTERY SPECIFICATION

VLRV2560B

Overview

RV series battery products are designed with ABS shell, can be used 24/7, which has outstanding advantages such as waterproof, impact resistance, good insulation performance, easy installation and maintenance-free. Some products also have special functions such as Bluetooth and low-temperature heating, which can meet the application needs of RVs, solar street lights, small medical equipment, toys and some small energy storage application.

Battery Module Features

Simple

Easily installation and capacity expansion, Maintenance-free (15Y design life).

Intelligent

Real-time monitoring & control, Passive balance, Bluetooth display, Low-temp heating.

Safe

LFP cell & system safety design.

Performance

High energy density, Excellent service life & Wide operation temperature range.

Battery Module Specification

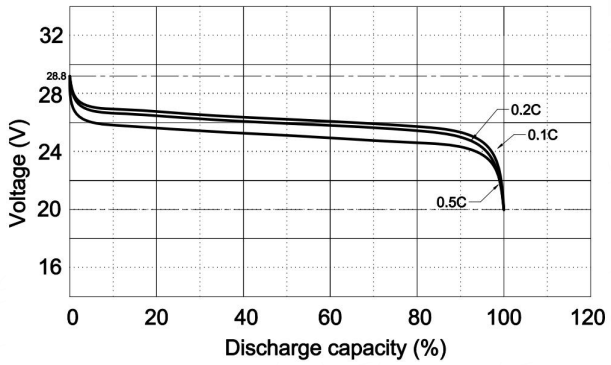
Model	VLRV2560B
Basic Parameter	
Rated Voltage [V]	25.6
Rated Capacity [Ah]	100
Rated Energy [Wh]	2560
Operation Parameter	
Voltage Range [V]	22.4~28.0
Cut-off Voltage [V]	22.4
Charge Voltage [V]	Recommended: 28.0 Max: 28.8
Recommended Charge Current [A]	30
Max Charge Current [A]	100
Max Discharge Current [A]	150
Internal Resistance [mΩ]	9.35
Physical Parameter	
Dimension：W*D*H [mm]	460*220*212
Weight [kg]	24.0±0.5
Display Method	Bluetooth/LED
Ingress Protection Level	IP67
Environment Parameter	
Humidity [%]	5-95% RH
Charge Temperature Range [℃]	-20 ~ 45 (<0℃, start heating)
Discharge Temperature Range [℃]	-20 ~ 55
Storage Temperature Range [℃]	-20 ~ 45
Service Life	
Cycle Life	＞ 6000 (0.5C@ 25℃, 80% DOD)
Design Life [Year]	15
Certification	
Transportation / Battery	UN38.3, IEC 62619, UL1973

BMS Parameters

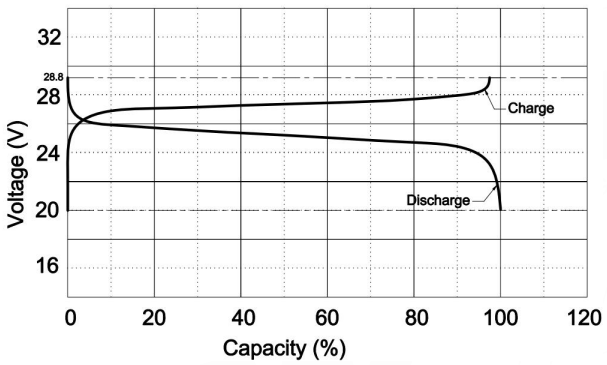
Item	VLRV2560B	Remark
Charge		
Cell Over-voltage protection [V]	3.8	Recovery @ 3.45V
Module Over-voltage protection [V]	30.0	Recovery @ 27.6V
Over-current protection 1 [A]	>160	Delay 2s
Over-temperature protection [℃]	>70	Recovery @ <60
Under-temperature protection [℃]	<-5	Recovery @ >0
Discharge		
Cell low-voltage protection [V]	2.3	Recovery @ 3.0V
Module low-voltage protection [V]	22.4	Recovery @ 24.0V
Over-discharging current 1 [A]	>160	Delay 30s，Recovery in 60s
Over-discharging current 2 [A]	>500	Delay 1.28s，Recovery in 60s
Short circuit [A]	>1000	400us
Over-temperature protection [℃]	>75	Recovery@ <65
Under-temperature protection [℃]	<-20	Recovery@ >-10
Other Function		
PCB Temp protection [℃]	>90	Recovery @ <70
Cell balance [mA]	130mA	Passive balance
Temperature accuracy [%]	3%	Measuring range -30~150℃
SOC accuracy [%]	5%	Integral calculation
Power consumption	≤ 300uA	Sleep mode
	≤ 20mA	Operating mode
Communication interfaces	CAN, RS485, Bluetooth	Can be customized to match the devices

Battery Performance Curve

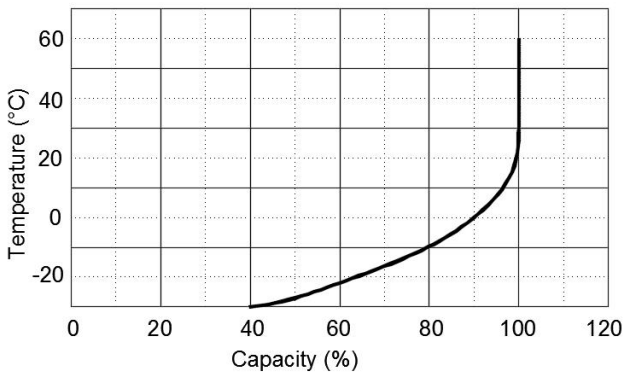
Discharge perfomance with different rate @ 25°C



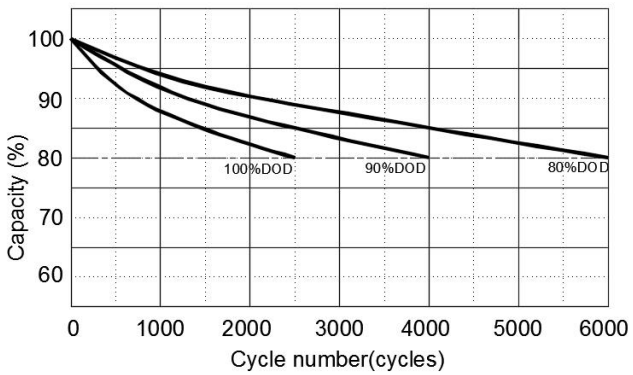
Charge & Discharge curve with 0.5C @ 25°C



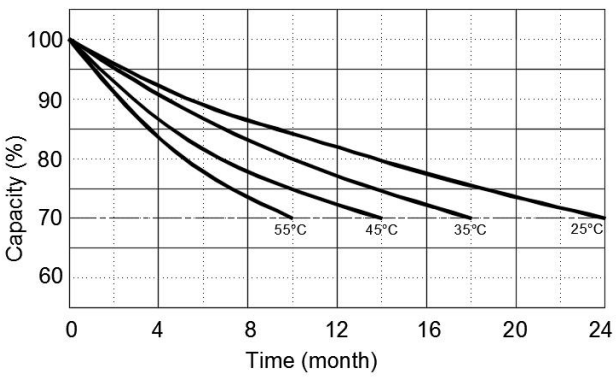
Discharge capacity with different temperature @ 0.5C



Cycle life with DOD @ 0.5C，25°C



Self-discharge @ different temperature



BATTERY ENGINEERING

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