

# VLRV5120(A/B/C) Datasheet



## Overview

Rv5120 series lithium iron phosphate (LFP) battery modules are specially designed for multi applications by Voltgo. These battery modules adopt ABS shell, which can be used 24/7. They have outstanding advantages of waterproof, Bluetooth, heating feature, impact resistance, good insulation performance, easy installation and maintenance-free. That lead they can meet the application of RVs, solar lights, small medical equipment, toys and some small energy storage system. Battery modules own intelligent BMS inside, which offers great advantages in terms of safety, cycle life, energy density and temperature range.

	VLRV5120A	VLRV5120B	VLRV5120C		
<b>Basic Parameter</b>				<b>Life Cycles</b>	
Rated Voltage (V)	12.8	25.6	51.2	Cycle Life	> 6000 (0.5C@ 25°C, 80% DOD)
Rated Capacity (Ah)	400	200	100	Design Life (Year)	15
Rated Energy (Wh)	5120	5120	5120		
<b>Operation Parameter</b>				<b>Environment Parameter</b>	
Voltage Range (V)	10-14	22.4-28	44.8-56	Humidity (%)	5-95% RH
Cut-off Voltage (V)	10	20	40	Charge Temperature Range	-20-45 °C / -4-113°F (Heating)
Recommend Charge Current (A)	≤120	≤60	≤30	Discharge Temperature Range	-20-55 °C / -4-131°F
Max Constant Charge Current(A)	200	150	100	Storage Temperature Range	-20-45 °C / -4-113°F
Max Discharge Current (A)	250A(Constant) 350A(Pulse:30s)	200A(Constant) 250A(Pulse:30s)	100A(Constant) 150A(Pulse:1min)		
<b>Physical Parameter</b>				<b>Certification</b>	
Dimensions :W*D*H	460*320*247(mm) 18.11*12.60*9.72(in)			Safety & Certification	UL1973 Compliant
Weight	41(Kg) 90.2(lb)			Transportation	UN38.3
Display Method	Bluetooth				

## Key Features



### MINIMAL INSTALLATION

This battery owns special structure design, the metal strips can be used not only as a "floor lock" & "rear lock", and as a connecting strip when multiple batteries are used in combination, which can greatly improve installation efficiency and reduce special tools requirement.

#### Multiple batteries combination



#### Heating Feature and Low-temp Protection

When the ambient temperature is between  $-20\sim 0^{\circ}\text{C}$  and an external power input exists the heating feature will automatically triggered to ensure that the battery can be charged normally ( $0\sim 45^{\circ}\text{C}$ )



#### Bluetooth

Monitoring the battery operation status (Voltage, Current, Temperature, SOC etc.) in real time with the built-in Bluetooth module on mobile devices



## Other Features



#### Compact Design

Smaller size & Lighter weight can save more space compared with VRLA battery.



#### Detachable Design

The detachable design ensures good maintainability of the battery and avoids damage to the case during possible repairs. (Repair requires trained engineers and professional equipment, and non-professional operation may result in a lower IP protection rating, ultimately affecting your product warranty)



#### High IP Rating

Ip65 design meets most application scenarios



#### Intelligent BMS

The battery management system (BMS) provides short circuit, over-voltage, low-voltage, over-temp, low-temp protection.



#### Maintenance-free

Quality cells ensure more than 6000 cycles (0.5C, 80%DOD@25°C), maintenance-free during the whole lifetime, and a wide operating temperature range.



#### Smart Balancing

Built-in balance circuit will auto trigger while reaches to set conditions, that will greatly improve the consistency of the battery and extend your lifespan.