

# VLRV1280A Datasheet



## Overview

12V100Ah lithium iron phosphate (LFP) battery modules are specially designed for multi applications by Voltgo. These battery modules adopt ABS shell design, can be used 24/7. which has outstanding advantages of waterproof, Bluetooth, heating feature, impact resistance, good insulation performance, easy installation and maintenance-free, which can meet the application needs of RVs, solar lights, small medical equipment, toys and some small energy storage application. Battery modules own intelligent BMS integrated inside, which offers great advantages in terms of safety, cycle life, energy density and temperature range.

Basic Parameter		Life Cycles	
Rated Voltage (V)	12.8	Cycle Life	> 6000 (0.5C@ 25°C, 80% DOD)
Rated Capacity (Ah)	100	Design Life (Year)	15
Rated Energy (Wh)	1280		
Operation Parameter		Environment Parameter	
Voltage Range (V)	10-14	Humidity (%)	5-95% RH
Cut-off Voltage (V)	10	Charge Temperature Range	-20-45 °C / -4-113°F (Heating)
Recommend Charge Current (A)	≤30	Discharge Temperature Range	-20-55 °C / -4-131°F
Max Constant Charge Current (A)	50	Storage Temperature Range	-20-45 °C / -4-113°F
Max Discharge Current (A)	100A(Constant) / 150A(Pulse: 30s)		
Physical Parameter		Certification	
Dimensions :W*D*H	330*172*220(mm) 12.99*6.77*8.66(in)	Safety & Certification	UL1973
Weight	11.2(Kg) 24.64(lb)	Transportation	UN38.3
Display Method	Bluetooth		

## Key Features



### Heating Feature and Low-temp Protection

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



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.