

# ORION LFP 12.8V 100Ah Battery

## Lithium Iron Phosphate



The ORION LFP 12V 100Ah battery is a popular lithium iron phosphate battery. It is intended for use in high capacity, high voltage battery. It can power a wide range of devices including an electric buffer, solar systems, toys, or smart doorbell.

Do not purchase batteries before reading and understanding these safety cautions. Using a lithium iron phosphate battery incorrectly may cause it to leak, generate heat, smoke, catch on fire, or explode.



### SAFETY

- +The cell must stay in the operating temperatures outlined in its data sheet
- +The cell must not exceed voltage, current, and other ratings in its data sheet
- +Store batteries separately, and do not transport without proper packaging
- +Never store or transport together with conductive or metallic objects particularly in a pocket or bag
- +Do not keep in the sun, in a hot car, or anywhere with direct heat
- +If the cell is attached to a PCB, keep it away from high-static environments
- +Recycle discontinued batteries according to local regulations and cover terminals with insulating tape before disposal
- +Discharge end or cut-off voltage in data sheet is lower-limit for discharge cycle and should not be exceeded
- +Charger or device should implement warning for over-voltage, over current, and over-temperature, control of overcharge, and charge timer
- +Be careful not to short-circuit

### TECHNICAL DATA

Battery Dimensions	33x17x21cm
Battery Weight	10.20kg
Cell Capacity (nominal/minimum) (0.5C Rate)	100Ah
Voltage (nominal)	12.8V
Internal Resistans ( $23 \pm 2^{\circ}\text{C}$ )	<20m $\Omega$
Energy Density	1280Wh
Recommended Standard Charge Method	20A, 14.60V CC-CV
Maximum Charge Method	50A, 14.60V CC-CV
Maximum Continuous Discharge	100A – 1C
Discharge Cut-off Voltage	8.80V
Cycle Life (80% DOD)	>2000 cycles
Operating Temperature	-20°C to 60°C
Storage Temperature	0°C to 35°C