

# ORION 9V 650mAh Li-ion Battery 1C (650mA)

## Lithium Ion Cell (with BMS)

The ORION 9V Li-ion is a popular lithium-ion cell. It is intended for use in high capacity, high voltage 6F22 battery packs. It can power a wide range of devices including an electric buffer, smart video doorbell, or fiber optic tester.

Do not purchase 6F22 li-ion batteries before reading and understanding these safety cautions. Using a lithium-ion cell 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

Cell Dimensions	26x49x19mm
Cell Weight	23.5g
Cell Capacity (nominal/minimum) (0.5C Rate)	650mAh
Voltage (nominal)	7.4V
Internal Resistance ( $23 \pm 2^{\circ}\text{C}$ )	$<195\text{m}\Omega$
Energy Density	4.81Wh
Recommended Standard Charge Method	130mA, 8.4V CC-CV
Maximum Charge Method	325mA, 8.4V CC-CV
Maximum Continuous Discharge	650mA – 1C
Maximum Pulse Discharge	1300mA – 2C
Discharge Cut-off Voltage	5.60V
Cycle Life	1000 cycles
Operating Temperature	$-20^{\circ}\text{C}$ to $60^{\circ}\text{C}$
Storage Temperature	$0^{\circ}\text{C}$ to $35^{\circ}\text{C}$