

# ORION D 4500mAh Cell

## Ni-Cd Rechargeable Battery



ORION rechargeable nickel-cadmium batteries feature the performance, high-power and reliability needed for today's high- technology equipment. It is suitable for making safe and economical battery packs. It can power a wide range of devices including an emergency lighting, toys, medical devices etc.

Do not purchase Ni-Cd batteries before reading and understanding these safety cautions. Using a Ni-Cd cell incorrectly may cause it to leak, generate heat, smoke, catch on a 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	32.2x60.5mm
Cell Weight	130g + 5g
Cell Capacity (nominal) (0.2 C Rate)	4500mAh
Voltage (nominal)	1.2V
Internal Resistans (23 ± 2°C)	<12mΩ
Energy Density	5400mWh
Recommended Standard Charge Method	450mA x 15hours
Rapid Charge Method	1350mA x 4hours
Maximum Continuous Discharge	13000mA (3C)
Discharge Cut-off Voltage	1V
Cycle Life	≥500 cycles
Operating Temperature	-20°C to 60°C
Storage Temperature	-20°C to 35°C
Charge Retention	3375mAh (28days)