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Image	Type	Voltage	Typical Capacity	Cutoff Voltage
	6LR61, 6LF22	9V	500mAh	4.8V
	CR2032	3V	225mAh	2V

## Discharge

Lion / LiPol can be deeply discharged, but must be charged separately (each cell) - affect lifespan  
 little NiMH / NiCD this won't matter it can be flat.

## Charging

CC	Constant Current	This design is usually used for nickel-cadmium and nickel-metal hydride cells
CV	Constant Voltage	Used for charging Lithium and some other batteries which may be vulnerable to damage if the upper voltage limit is exceeded
-dV (-ΔU)	Derivative Voltage (Change in voltage)	This is the most popular method for rapid charging for NiCD
dt	Derivative Time (Change in time)	
	Pulsed charge	This enables the chemical reaction to keep pace with the rate of inputting the electrical energy.
	Negative Pulse Charging	It applies a very short discharge pulse, typically 2 to 3 times the charging current for 5 milliseconds, during the charging rest period to depolarise the cell.

QA:

Can I charge LiPol with LiOn charger? Yes, but be careful.

Longer lifespan? Use battery/cell between 50-75°C (Lion-LiPol) 70-95°C (NiMH)

## Primary

### Alkaline

Labeled as: Alkaline

2x 11x better than Zinc-Chloride/Carbon

Time durability	5-10 years
Nominal cell voltage	1.5 V
Self-discharge rate	<0.3%/month

## Zinc-Carbon

Labeled as: GENERAL PURPOSE/SUPER CELL

## Zinc-Chloride

Labeled as: SUPER/HEAVY DUTY

# Secondary

## NiCD

Memory effect

Cycle durability	~2,000 cycles
Nominal cell voltage	1.2 V

## NiMH

Memory effect

Cycle durability	~700 cycles
Nominal cell voltage	1.2 V

\* *Recommended - Eneloop, Panasonic, Tesco Green, GP ReCyko+*

## Li-Ion

No memory effect

Cycle durability	~700 cycles
Nominal cell voltage	3.7 V
Self-discharge rate	<5%/month
Max voltage	4.2V

# Li-Pol

No memory effect

Cycle durability	<2000 cycles
Nominal cell voltage	3.7 V
Cut-off voltage	2.7 V

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