

Glossary of Terminology

Term	meaning
Average Capacity	The amount of energy which can be obtained from a cell under set temperature, discharge current and cut-off voltage conditions. Measured in Ampere hours (Ah), or mAh.
Battery Life Characteristics	Characteristics shown according to the time needed for each charge / discharge cycle when cycling charge / discharge under set conditions. Also referred to as "cycle characteristics".
Capacity	A battery's electric potential. Usually means capacity in ampere hours, indicated by Ah or mAh.
Capacity Recovery Ratio	Ratio of the maximum capacity obtained from a cell under set conditions that has been stored for a fixed period of time and charged a fixed number of times, over average capacity (assumed value of 100).
Capacity Retention Ratio	Ratio of cell capacity measured under set conditions after storage for a fixed period of time, over average capacity (assumed value of 100).
Charge Capacity	Amount of energy used in charging a battery. For constant current charging, it is the product of current and charge time. Measured units called Ampere hours (Ah).
Cut-off voltage	Voltage which expresses the limit to end discharge.
Electrolyte Leakage	When electrolyte fluid from inside the battery leaks to the battery's outer surface.
Energy Density	The amount of energy which can be obtained from a single cell by weight or by volume. Measured in units of Wh / kg or Wh / l.
It	Represents "Current" and is defined as follows $I_t(A) = \text{Rated Capacity (Ah)} / 1(h)$.
Large Current Discharge	Discharge with a relatively high current compared to the battery capacity. Also referred to as "high-rate" discharge.
Nominal Voltage	Voltage shown on the battery label.
Overcharge	Continued charging after the cell has reached a fully charged state. Overcharging a battery can adversely affect its safety and electrical characteristics.
Overdischarge	Continued discharge after cell voltage falls below the determined cut-off voltage.
Self-discharge	When battery capacity declines without current flowing to an outside circuit.
Unused Battery	An unused battery is defined as one produced less than 1 month ago, and has undergone less than 5 charge / discharge cycles.