will reduce cycle life.
with excessive voltage
arging
discharging with excessive current
ng to protection working voltage
erature out of the recommended

of secondary, Lithium-ion batteries
memory effect.

tors affecting for Cycle Life

ttery Cycle Life Reduction
is determined mainly by the
electrolyte causing a rise in internal
decline of reversibility of electrode
s.
of phenomena are accelerated when
re conditions recommended by
naintained.

rature
ture is one of the factors that make
cycle life of Lithium-ion battery.
nendation is 0-40deg.C for charge
er discharge.

Above mentioned is referring to full charge discharge. However, in practical use, most case is shallow charge-discharge. Lithium-ion battery has no memory effect like Ni-Cd and Ni-MH.

Then, let us explain about shallow charge-discharge cycle characteristics. In a case of, for example, a experimental regular cycle of full charge - 50% discharge cycle, the cycle life is about twice as long as normal full cycle. This is shown in fig.3-13.

Fig.3-13: Cycle Characteristics (Depth of Discharge)