



Re: LL Series (Rechargeable Ni-Mh Batteries) for Instantaneous Use

Combine: Alkaline Battery (Instantaneous Use)+ Rechargeable Ni-Mh Battery (1,000 times)

- *Alkaline battery's function: Long Life, Ready to Use, Can be used anywhere for any application*
- *Rechargeable battery's function: Reusable, Recycle, High Capacity, and No hazardous material*

- 1) Technology Driven from Sanyo-eneloop Ni-Mh Battery.
- 2) Technical Data for HKBIL - (LL Series Ni-Mh Batteries).
- 3) Benchmarking with Sanyo battery.
- 4) Competitive Advantage of HKBIL - (LL Series Ni-Mh Batteries).
- 5) Testing condition. (If applicable).
- 6) Business Portfolio. (If applicable).





1) Technical Driven From Sanyo-eneloop Ni-Mh Battery.



All the strengths of rechargeable and non-rechargeable batteries.
NOW IN ONE!

Do you know...
eneloop
can be recharged up to **1000 times!**
Eco-Friendly
Economical

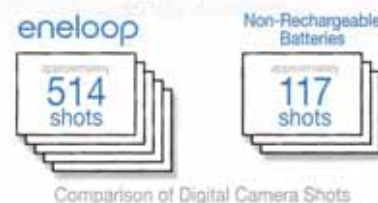


Breakthrough Technology

Convenient
Anytime...
Anywhere...
Wherever you are...

4.4* Times More Powerful

Take nearly 4.4* times more digital pictures



*Test results based on a Sanyo Digital Camera DSC-4 at room temperature, taking one photo every 20 seconds where one out of every three photos uses flash and with the LCD on continuously. Different results may be obtained with other products and situations.



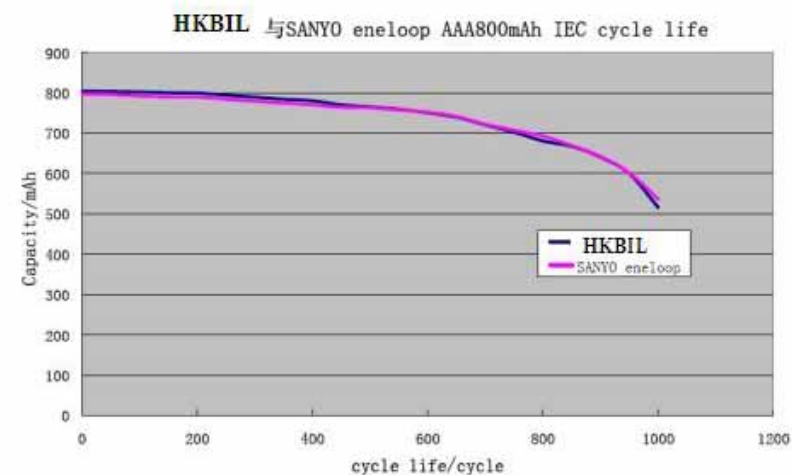
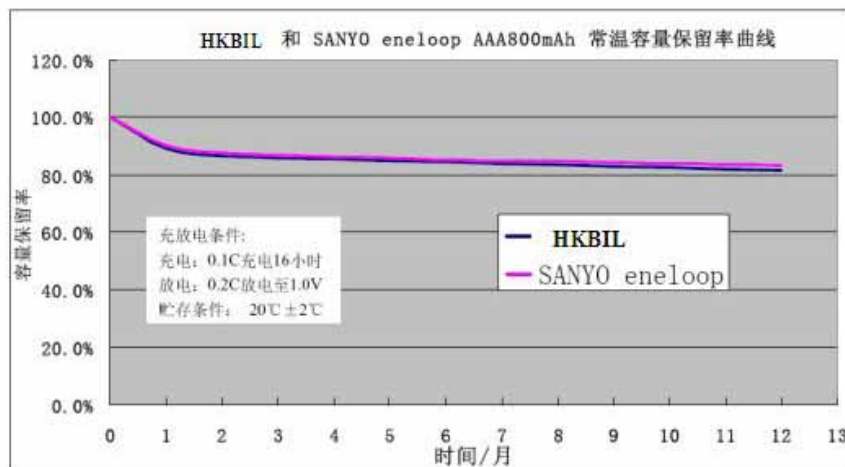
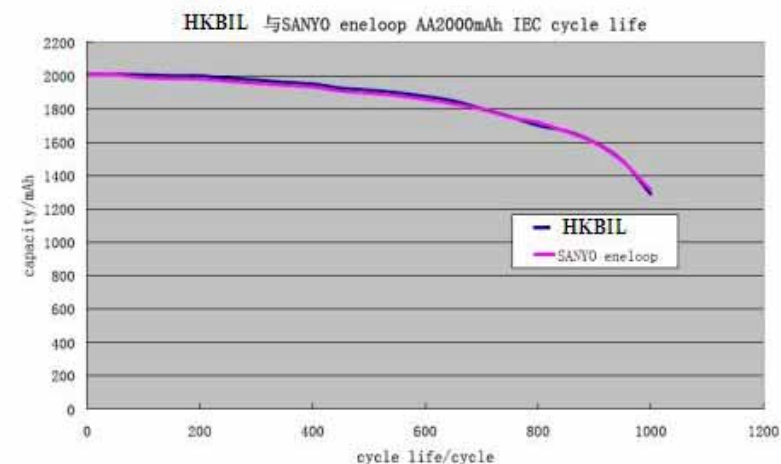
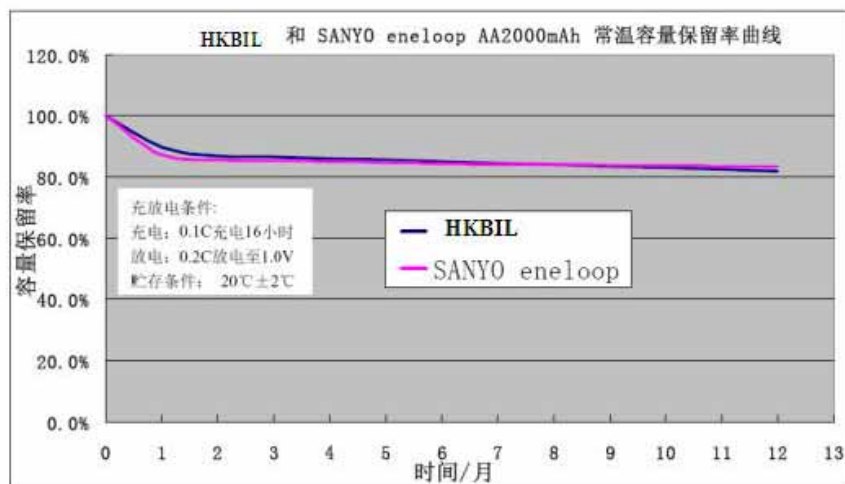


2) Technical Data for HKBIL (LL Series NiMh Batteries):

Model:	LL-800AAAH	LL-2000AAH	LL-4000CH	LL-8000DH	LL-210-9V
Type:	AAA	AA	C	D	9V (AAAAA) x7
Dimension With Sleeve (mm) D x H:	10.5 x 44.5 mm	14.5 x 50 mm	26.0 x 50.0	33.0 x 61.5 mm	T15.3 x W26.1 XH48.3
Recommendation discharge Current (mA):	75 - 2250 mA	190 - 5700 mA	400 - 2000 mA	800 - 4000 mA	20 - 600 mA
Nominal Volt 1.2V per Cell / Over 1.25 V for shipment:	1.2V	1.2V	1.2V	1.2V	8.4V
Capacity when discharge at 0.2C to 1.0V at 20°C:					Cut off 7.0V
: Typical (mAh)	800 mAh	2000 mAh	4050 mAh	8050 mAh	210 mAh
: Minimum (mAh)	750 mAh	1900 mAh	4000 mAh	8000 mAh	200 mAh
Charging Condition (mA) at 20°C for 16 hours:	80 mA	200 mA	400 mA	800 mA	20 mA
Fast Charge up to: Charge termination control recommendation control parameters: -ΔV: 0-5 mV, DT/dt: 0.8-1 °C/min TCO 45-50 °C, Timer: 100 -110% nominal input	Up to 750 mA	Up to 950 mA	Up to 2000 mA	Up to 4000 mA	Up to 200 mA
Permanent Charging (mA):	22 - 38 mA	57 - 95 mA	120 - 200 mA	240 - 400 mA	6 to 10 mA
Max. Overcharge current: (mA) up to 12 months:	80 mA	200 mA	400 mA	800 mA	20 mA
Service Life under IEC61951-2/2003/7/4.1.1. > 500 Cycles:	> 500 Cycles	> 500 Cycles	> 500 Cycles	> 500 Cycles	> 500 Cycles
Application Nearly 1,000 times:	Nearly 1,000 times	Nearly 1,000 times	Nearly 1,000 times	Nearly 1,000 times	Nearly 1,000 times
Continuous Overcharge for 12 months. No conspicuous deformation and / or leakage happen:	Yes	Yes	Yes	Yes	Yes
Weight: (g) Only for Reference:	12 g	287 g	80 g	155 g	40 g
Internal Resistance: ≤ (mΩ) Upon fully charged:	≤ 65 mΩ	≤ 50 mΩ	≤ 30 mΩ	≤ 30 mΩ	≤ 900 mΩ
Max Charging Voltage 1.5V at (mA) charging:	1.5V at 80mA	1.5V at 200mA	1.5V at 400mA	1.5V at 800mA	10.5V at 20 mA
Self discharge: stand charged, stored x 360 days:	>80% original Capacity	>80% original Capacity	>80% original Capacity	>80% original Capacity	>80% original Capacity
Ambient Temperature Range Recommendation:	Same	Same	Same	Same	Same
Stand charging : 0 °C to 45 °C	Conditions	Conditions	Conditions	Conditions	Conditions
Fast Charging : 10 °C to 40 °C					
Discharging : -20 °C to 60 °C					
Permanent Charging : 0°C to 45 °C					
Storage (6 months) : -20 °C to 35 °C					
Storage (1months) : -20 °C to 45 °C					
Storage (1weeks) : -20 °C to 55 °C					
Blister Card Packaging:	2 cell or 4 cell	2 cell or 4 cell	2 cell	2 cell	1 cell



3) Benchmarking with HKBIL and Sanyo-eneloop





More Pictures with your digital Camera:

Time more Powerful Take nearly 4.4* times more digital pictures

Comparison of	HkbiL (LL)	Sanyo-eneloop	Alkaline Battery
Digital Camera Shots	1270 shots	1160 Shots	241 shots

4) Competitive Advantages of HkbiL (LL Series Ni-Mh Batteries):

- Wide Rings Items: AAA, AA, C, D, 9V (Sanyo- only offer AAA, AA).
- Customer Private Branding is Acceptable.
- Efficiency Lead-time normally within 40 days
- Cost saving, one battery is able to be less the cost of 999 disposable batteries
- Better performance under all weather conditions
- Global License Covered.

