Battery Types

There are three main battery types; nickel cadmium (NiCd), nickel metal hydride (NiMH) and lithium ion (Li-ion).
The capacity of batteries is measured in milliampere hours (mAh).

Memory Effect

If a battery is repeatedly re-charged before it is completely discharged, over time the battery "remembers" this partial charge and will never deliver its full capacity.
Memory effect can be reduced or eliminated by the use of an efficient battery maintenance regime. (A regular full discharge.)

Nickel cadmium (NiCd) is the oldest chemistry.
Nickel cadmiums out-perform other battery types in extreme high and low temperatures. They are also more resistant to overcharging and have a longer life expectancy.
Generally nickel cadmium batteries cost the least.
However, they are larger and heavier than other types and tend to develop memory effect.
It's not unusual to see nickel cadmium batteries last for 2 to 3 years, if well treated.

Nickel metal hydride (NiMH) batteries are similar to nickel cadmium, but are more resistant to memory effect. They are somewhat lighter, more compact and generally cost slightly more than nickel cadmium batteries. These batteries however, are less tolerant of overcharging and have a shorter life expectancy.
Typically a nickel metal hydride battery has a life expectancy of 1 - 2 years.

Lithium ion (Li-ion) batteries are the lightest, smallest and do not suffer memory effect.
They are also the most expensive. Lithium ion batteries normally have a specific number of charges they are capable of receiving. Once the battery has experienced the maximum number of charge cycles it will not generally accept a charge.

Batteries are designed to offer a full 8 hour shift from a single charge. However, “high capacity” batteries are usually available for longer shift requirements.

Get in touch if you need more advice.

E-mail: sales@radphone.co.uk

Tel: 01482 228725
www.radphone.co.uk