Stop using Ni-Cd emergency lights NOW

RDF
Lighting-Power-Control

Sustainability, protection of the environment, reduction of pollution… these phrases are now repeated so often; but do we know how to reassure our clients that we are taking the necessary actions?
These promises are difficult to keep in the emergency lightning market due to the omnipresence of the Nickel Cadmium (Ni-Cd) battery and the fact that they include Cadmium. Each emergency lighting luminaire includes an internal battery and so every UK school, office, warehouse, retail outlet, sports and industrial building is riddled with batteries that are harmful to the environment and have been banned in almost all other products.
How can we care for the environment then? The answer is simple – ask for a more appropriate battery in your emergency lighting, i.e. lithium-iron-phosphate LiFePO4.
Here's a few reasons why *RDF Lighting Power and Control* offer these batteries as an alternative in every emergency lighting product in their range.

1. They are environmentally-friendly. LiFePO4 batteries **do not contain harmful substances such as Cadmium** that has been banned for use in the UK in most other products. Ni-Cd batteries must be very carefully recycled to stop the poisonous metal Cadmium from reaching the environment where it can be massively damaging to human health.

2. The usable life of the emergency luminaire is extended due to an increased duty cycle count. In comparison to Ni-Cd batteries, LiFePO4 batteries have **three times as many work cycles**, while in comparison to nickel metal hydride batteries (Ni-MH) up to **five times more work cycles**! That translates to an average lifespan of LiFePO4 battery at **6 to 8 years.**

3. LiFePO4 batteries are not subject to **the memory effect**, i.e. there is no need for performing the standard three battery charge/discharge cycles. For comparison, Ni-Cd batteries should be discharged and charged in full cycles to avoid significantly shortening their useful life.

4. The specification of LiFePO4 batteries allows them to operate at low temperatures. The combination of a LiFePO4 battery and a high ingress protection rating of IP65 allows for an outdoor installation of the luminaire (COLD version) which are proven to operate normally down to -15°C. Ni-Cd batteries include water in the electrolyte, which degrades the battery at low temperatures. Ni-Cd

performance is also unreliable at low temperatures meaning the emergency luminaire may not perform as expected during winter months or even in environments below 10°C.

5. Due to the lower energy density, LiFePO4 are smaller in comparison to Ni-MH and Ni-Cd batteries which also makes them lighter and therefore more environmentally friendly to transport in bulk.

6. Indisputable fact - energy efficiency. LiFePO4 does not and is not allowed to charge constantly, which clearly translates to significant energy savings over the lifetime of the emergency luminaire.

RDF and TM TECHNOLOGIE are committed to transferring their products to offer the LiFePO4 battery **as a standard** because you, your surroundings and the environment are of the highest importance. The smartphone and tablet market now almost entirely feature battery solutions based on lithium-ion batteries; the time has surely come for emergency lighting to follow suit. We believe that each component which can make the world a better place is worth our attention.

Check out our Luckins pages or our main website here to see our range of products stocked in the UK or download our catalogues to see the full product range available on short lead times. Call us on 0333 772 9019 or email at sales@rdflightingpowerandcontrol.co.uk to discuss all your emergency lighting requirements from lithium batteries to addressable emergency lighting, from wireless systems to central battery systems.