



BENEFITS OF LITHIUM

Extending the period between
costly battery replacement

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When considering the ongoing costs of operating your lighting installation the maintenance costs for emergency luminaires can form a significant proportion, second only to power consumption.

Aside from the need to undertake function testing on a monthly basis and duration tests annually whilst maintaining accurate test records off site, the limited life time of Nickel Cadmium and Nickel Metal Hydride batteries means that regular battery replacement is required.

The material cost of the batteries is often exceeded by the labour costs to undertake such replacement, especially so for luminaires mounted at height where costly access equipment is needed. Lithium batteries offer a solution to this issue with higher energy density, extended warranties and greater life expectancy extending the period between replacement, whilst automated test systems such as Self Test and DALI Autotest can eliminate the need for manual testing.

Our focus on reducing the lifetime operating costs of our emergency luminaires has had battery safety as the foremost concern from the outset. Extensive testing has been undertaken in conjunction with our suppliers to select Lithium Iron Phosphate batteries for the Dextra emergency range, this battery chemistry offers excellent lifetime and energy density but is also amongst the most stable of the lithium battery chemistries.

Over a period of two years dozens of battery samples using a range of chemistries and from numerous manufacturers were subjected to testing in every regard for both lifetime and durability but also extreme failure scenarios such as excessive ambient temperature, voltage, penetrative damage and exposure to fire. Lithium Iron Phosphate demonstrated superior safety and stability of all the chemistries in every scenario.

The stability of our chosen chemistry is combined with battery cell thermal protection and balanced cell charging to ensure that all Dextra lithium ranges offer both significant lifetime cost advantages, increased periods between battery changes, extended warranties and complete peace of mind that your emergency installation uses only the safest market leading emergency components.

