LED vs Fluorescent lights – Why Should ATM Service Companies Care?

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TestLink™

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The LED (Light Emitting Diode) is a widespread technology which is found in countless household gadgets.

The technology is now used extensively in commercial applications as a result of the tangible benefits they offer.

In addition to the manufacture of consumer goods, LEDs are also used extensively in commercial applications as a result of the many tangible benefits they afford.

The benefits are extended in to ATMs and are significant. This article explores the reasons why we should care about switching fluorescent lighting to LED equivalents.

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1. Improved Energy Efficiency

Fluorescent lights are less efficient than LEDs and as a result are much more expensive to run. This is especially problematic for companies that use a high volume of them in their estate.

For ATM service companies, replacing fluorescent lighting with LEDs will reduce the power consumption of your estate and, in turn, cause the associated overheads to decrease as well.

For example, on an estate with 2000 ATMs using fluorescent tubes would be consuming 630,720 kw/h per year. An estate that switched over to LED lighting would be consuming 245,280 kw/h per year. With an UK average cost of kw/h being £0.22 this would offer a company a saving of £84,796 per year.

2. Increase uptime

Fluorescent tubes degrade over time and, near the end of their life, can start flickering.

This flickering can cause interference on the internal data bus of the ATM and cause the machine to constantly reset. Furthermore, the machine would be down until a Second Line Engineer could attend to replace the tube.

A repair of this nature can also result in another visit as the miscellaneous interface PCB on NCR ATM's can blow as a result of the tube failure. Engineers are unlikely to carry the board in their boot kit so a separate visit would need to be scheduled to fix the problem.

LEDs eliminate both of these issues enabling Engineers to spend their time working on more technical ATM faults.

3. Longer Bulb Life

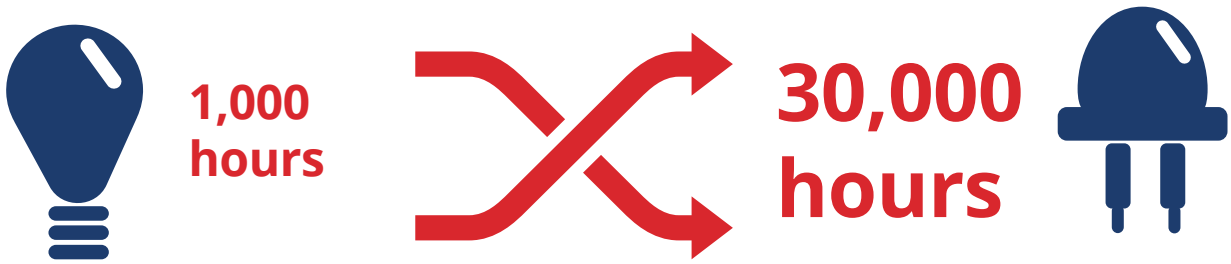
In addition to the power savings afforded by replacing older technology with LEDs, these lights are also known to have a substantially longer life.

A conventional domestic light bulb will last around 1,000 hours before it needs replacing, whereas fluorescent tubes can have an effective life of up to 10,000 hours.

These are dwarfed, however, by the exceptional longevity of LEDs which provide users with upwards of 30,000 hours before needing to be changed. LEDs have been known to last for up to 11 years under continuous, 14 hour use which is ideal for applications such as ATMs.

This inherent characteristic is hugely beneficial for companies which rely on adhering to pre-established uptimes in order to operate effectively as ATMs are now at lower risk of lighting-related failures taking them out of action.

Replacing broken lighting entails not only the cost of the replacement bulb itself but, also, the associated labour too. Frequent call outs for second line maintenance can be minimised through the implementation of LED lighting.



4. Improve Corporate, Social Responsibility

Naturally, using less energy to power the same amount of light production is hugely beneficial to the environment.

LEDs also contain far fewer chemicals than fluorescent lamps which commonly contain mercury, phosphor and other elements which are hazardous to the environment.

The extremely long life of LEDs also has positive repercussions on the environment for companies which use them in place of fluorescent tubes as the disposal process of these is far more environmentally friendly.

LEDs require less material to manufacture and are not required in the same volumes as fluorescent lighting which means the overall carbon footprint of LEDs is much better.

5. Design Characteristics

Unlike other options, LED lights have the ability to power on instantly, resulting in a much quicker emission of light and an improved experience for the user in general.

They can also be turned on and off repeatedly with an instant response without diminishing their effective life – a common problem with fluorescent solutions.

LEDs maintain brightness levels throughout their entire life unlike fluorescent tubes which will start to lose efficiency from the moment they are powered on.

Furthermore, the design of LEDs enables the light produced to be directed in specific directions in order to illuminate selected areas rather than wasting light.

This means that all the light can be used to enhance the lighting on the logo panel or to improve the experience for the user.

This characteristic is not only extremely useful but, also, helps to minimise the amount of wasted light (around 30-40% of light from fluorescent bulbs is not used as a result of non-directional lighting).

Quicker emission of light	**Improved experience**	**Maintain brightness**
Instant response	**Illuminate selected areas**	**Minimise wasted light**

At TestLink, we supply custom LED upgrade kits which allow for the lighting within ATMs to be easily upgraded. This increases the durability of the machine's lighting, improves the customer experience and reduces the likelihood of failures occurring.

Find out how TestLink's LED Logo Panel Upgrade Kit can help your business by contacting us.

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