

Top 10 Benefits of Using LED Lights Instead of Conventional Lighting

You certainly hear and read a lot about the advantages and benefits of the energy efficiency of LED light emitting diodes vs traditional lighting. When you compare them to other energy-saving illumination methods that are available on the market today, you will find that LED lighting is by far the most power-saving and smart solution. Recent research and developments in the field of LED illumination is about to bring upon us an intelligent green LED lighting revolution that will help us save the planet. Join us now and become a part of it!

By far the most energy efficient, the cleanest and most eco-friendly way of illumination is LED lighting, which is basically digital light and comes with a multitude of amazing benefits.

In fact, in makes a big leap in technology that can been seen much as an upgrade from analog to digital. LED is digital light, and the advantages versus conventional 'analog' lighting are so huge and of major benefit to both the users of this "technology of digital light" as well as also to our planet.

That's why we believe to have plenty of good reasons for being passionate about LED illumination and are so glad about offering you our exclusive <u>LED lighting wholesale</u> section with quality LED lights from certified LEDLuxorTM LED manufacturers. So let's break it down and take a closer look at the...

Top 10 Benefits of LED Lighting

1. Long Life

Long life time stands out as the number one benefit of LED lights. LED bulbs and diodes have an outstanding operational life time expectation of up to 100.000 hours. This is 11 years of continuous operation, or 22 years of 50% operation. If you leave on the LED fixture for 8h per day it would take around 20 years before you'd have to replace the LED bulb.

LED's are different to standard lighting: They don't really burn out and stop working like a standard light, moreover the lighting diodes emit lower output levels over a very long period of time and become less bright.

2. Energy Efficiency

Todays most efficient way of illumination and lighting, with an estimated energy efficiency of 80%-90% when compared to traditional lighting and conventional light bulbs. This means that about 80% of the electrical energy is converted to light, while a ca. 20% is lost and converted into other forms of energy such as heat.

With traditional incandescent light bulbs who operate at 20% energy efficiency only, a 80% of the electricity is lost as heat. Imagine the following scenario:

If you use traditional lighting and have an electricity bill of e.g US\$ 100, then US\$ 80 of that money has been used to heat the room, not to light it! Using LED illumination with 80% efficiency, the electricity costs would be around US\$ 20 and you'd have saved around US\$ 80.

The long operational life time acts as a multiplicator and helps achieve even more energy efficiency, especially large scale and when thinking in terms of urban infrastructure projects, such as cities, railroads and airports.

Think of e.g an airport using energy efficient LED lighting exclusively and achieving a 30% power consumption reduction in comparison with an airport using conventional lighting technology.

Because the long life span of LED lights, also the maintenance work - think of all the work and energy it would take to purchase, stock and change the conventional light bulbs of an airport - you'll see that you can make significant energy savings also when it comes to maintenance and replacement due to the long operational life times of LED lighting.

3. Ecologically Friendly

LED lights are free of toxic chemicals. Most conventional fluorescent lighting bulbs contain a multitude of materials like e.g mercury that are dangerous for the environment.

LED lights contain no toxic materials and are 100% recyclable, and will help you to reduce your carbon footprint by up to a third. The long operational life time span mentioned above means also that one LED light bulb can save material and production of 25 incandescent light bulbs. A big step towards a greener future!

4. Durable Quality

LEDs are extremely durable and built with sturdy components that are highly rugged and can withstand even the roughest conditions.

Because LED lights are resistant to shock, vibrations and external impacts, they make great outdoor lighting systems for rough conditions and exposure to weather, wind, rain or even external vandalism, traffic related public exposure and construction or manufacturing sites.

5. Zero UV Emissions

LED illumination produces little infrared light and close to no UV emissions.

Because of this, LED lighting is highly suitable not only for goods and materials that are sensitive to heat due to the benefit of little radiated heat emission, but also for illumination of UV sensitive objects or materials such a in museums, art galleries, archeological sites etc.

6. Design Flexibility

LEDs can be combined in any shape to produce highly efficient illumination. Individual LEDs can be dimmed, resulting in a dynamic control of light, color and distribution. Well-designed LED illumination systems can achieve fantastic lighting effects, not only for the eye but also for the mood and the mind:

LED mood illumination is already being used in airplanes, classrooms and many more locations and we can expect to see a lot more LED mood illumination in our daily lives within the next few years.

7. Operational in Extremely Cold or Hot Temperatures

LED are ideal for operation under cold and low outdoor temperature settings. For fluorescent lamps, low temperatures may affect operation and present a challenge, but LED illumination operates well also in cold settings, such as for outdoor winter settings, freezer rooms etc.

8. Light Dispersement

LED is designed to focus its light and can be directed to a specific location without the use of an external reflector, achieving a higher application efficiency than conventional lighting. Well-designed LED illumination systems are able to deliver light more efficiently to the desired location.

9. Instant Lighting & Frequent Switching

LED lights brighten up immediately and when powered on, which has great advantages for infrastructure projects such as e.g traffic and signal lights.

Also, LED lights can switched off and on frequently and without affecting the LED's lifetime or light emission. In contrast, traditional lighting may take several seconds to reach full brightness, and frequent on/off switching does drastically reduce operational life expectancy.

10. Low-Voltage

A low-voltage power supply is sufficient for LED illumination. This makes it easy to use LED lighting also in outdoor settings, by connecting an external solar-energy source and is a big advantage when it comes to using LED technology in remote or rural areas.

Did these top 10 benefits of LED lighting convince you? LED lighting has even more benefits and advantages, so make sure you go LED and save both the planet - and your money!