

[LED lights More Good than CFL lamps](#)

LED lights have a lifespan more than 35,000 hours, compared with CFL lamps (Compact Fluorescent Lamp) which only 6,000 hours. Note the CFL light box, usually written with the use of 4 hours a day (at 6 pm - 10 pm) CFL lamps lasting more than 4 years (4 years x 365 days x 4 hours = 5840 hours. Means with the same calculation would hold CFL Lamp 24 years.

Now in terms of price, the price of good quality CFL Lamp 8 Watt is approximately Rp. 28.000. 3 Watt LED lamp price is around Rp. 120,000. So the price of LED lights approximately 4 times more expensive than CFL lamps while endurance is more than 6 times.

By using less energy, which is very interesting offerings. CFL Lamp 8 Watt equivalent to 3 Watt LED lamp. Standards of efficient CFL lamps have a 14-17 Lumens / Watt (Lumens is the measure of light by the human eye). LED lights have a 60-100 Lumens / Watt. With LED light 3 x 60 Watt Lumens = 180 Lumens, 8 x 17 Watt CFL Lumes = 136 Lumens.

LED (Light Emitting Diode) is operated with direct current (Direct Current) 12 Volt. LED lights also can be operated using alternating current (Alternating Current) 100-240 volt (electricity for the house). For that LED lights have an internal circuit (converter) to convert AC into DC. Heat arising from the conversion, because it is on AC LED lights generally you can see the cooling fins.

Small LED lights use a small current, in the example above, 3 Watt LED lamp size of two millimeters x 2 millimeters. For rooms that require greater illumination light is needed more light (lumens). For that it must be enlarged size LEDs, LED growing lack of heat is generated. Another solution is to multiply the little LEDs in parallel.

LED lights are also suitable for use in decoration flickering on and off). Lifespan (survival) are not affected to the LEDs on and off.

Other LED Implementation:

- * [LED light for street lighting](#) (street lighting PJU)
- * [Traffic lights and warning lights](#) (red light yellow green, yellow lights flickering, OBL)
- * Lamp garden with solar power (without power cable)
- * Flashlight and emergency lights (due to energy saving, longer battery used)

