

Take Control & Save[®]

A Cooperative Effort for Energy Efficiency

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LED holiday lights

What is an LED?

Light emitting diodes, or LEDs, are small light sources that are illuminated by the movement of electrons through a semiconductor material. LEDs are more efficient, durable, versatile and longer lasting than incandescent and fluorescent lighting.

Save during the holidays with LED light strings

As the weather turns colder, you will see homes, businesses and communities start to brighten up with holiday decorations and lights. LED holiday lights offer a lower energy cost alternative to traditional incandescent light strings and are a great way to show your holiday spirit while maintaining your smart energy sense. LED light strings are up to 90 percent more efficient and last up to 10 times longer than traditional light strings.¹ See cost comparisons on the back page.

Stay safe this holiday season

LED holiday lights are cooler than incandescent light strings, reducing the risk of fire and personal injury. Each light does not have moving parts, filaments or glass so they are much more durable and shock-resistant than other light strings. Bulbs are constructed of a hard plastic, which makes lights safer to use since you don't risk potential broken glass. And because they use less power, it is safer to connect multiple strings of LED holiday lights end-to-end without overloading the wall socket.

Energy Star[®] rated LED light strings are independently tested to meet strict lifetime and electrical requirements. For a list of manufacturers and brands of Energy Star[®] rated holiday lights which have been tested for both energy efficiency and quality standards, visit www.energystar.gov/lighting, then click 'Decorative Light Strings' under Related Products on the right sidebar.

Advantages of buying LED holiday lights this season

LED holiday lights:

- ~ Use up to 90 percent less energy than traditional holiday lights
- ~ Can last up to 10 times longer than traditional light strings
- ~ Are cool to the touch, reducing the risk of fire
- ~ Do not have filaments or glass so they are much more durable and shock-resistant than other light strings
- ~ Are available in a variety of colors, shapes, and lengths



¹Source: U.S. Department of Energy; www.energystar.gov

LED holiday lights are available in many varieties

LED light strings are available at many retailers, in multiple shapes, sizes, colors and lengths. Some models even deliver features such as dimming or color shifting. Many retailers also carry pre-lit trees with LED lights attached.

Sizes include:

C6, C7, C9, M5 (minis), G12 (round) and more.

Colors include:

Green, blue, red, yellow, bright white, warm white, orange, purple and multi-colored.

Shapes include:

Traditional, minis, round, net lights, snowmen, snowflakes, icicles, stars and more.



Bright white C9 lights



Multi-colored mini lights



Multi-colored net lights







Warm white G12 lights

Take Control & Save with LED holiday lighting

Although LED holiday lights are typically more expensive to purchase than traditional holiday lights, you will make up the difference in energy savings over the life of the lights. Much like anything that gives you a return on your money, you must invest to get a return.

Compare then Take Control & Save!

Running LED holiday lights to decorate one 6-foot tree for 12 hours per day for 40 days can save significantly more energy when compared to decorating a 6-foot tree with traditional incandescent holiday lights:

Type of light		Electricity cost*
Standard C9 incandescent (125 bulbs, 6.6 watts each)		\$39.60
C9 LED holiday lights (125 bulbs, 0.096 watts each)		\$0.58
Mini incandescent lights (300 bulbs, 0.408 watts each)		\$5.88
Mini LED (M5) lights (300 bulbs, 0.048 watts each)		\$0.69

*Assumes an electricity price of 10 cents per kilowatt-hour; watts per strand based on Home Accents Holiday brand light strings.

See the chart for comparisons on standard C9 bulbs versus LED C9 bulbs and mini incandescent lights versus mini LEDs. For a 6-foot tree, mini LEDs can save more than \$5 per season compared to incandescents, and more than \$39 per season when comparing the C9 bulbs. Since most LED light strings last about 20,000 hours (enough for about 40 holiday seasons)¹, if lighting with C9 strings you have the potential to **save over \$1,560 over the lifetime of the LED light strings**, just for one tree! Imagine the potential savings if you use lights to decorate your whole house!

For more ideas on how to **Take Control & Save**, contact your local electric cooperative.

¹ Source: www.energy.gov