

LED holiday lights

As holiday lighting is used more year-round, consumers are finding that LED (light-emitting diode) lights are an energy-efficient choice. LEDs were developed from semiconductor technologies in the 1970s. Today, highly efficient LED flashlights, holiday lights, traffic signals and exit signs are available.



LEDs are constructed from tiny solid-state chips similar to those used in computers. These chips directly convert electricity to light without the use of a filament or glass bulb. Instead, the chips are encapsulated in solid plastic that are made into a variety of shapes and sizes. The most common style is the “strawberry” shaped bulb with the most common size being a string of 35 or 70 lights.



For years, conventional incandescent C7 bulbs and smaller mini-lights have been the standards in holiday decorating. LED lights look different, appearing to shimmer because the bulbs are faceted. Small in size, typically from 3/8” to 1”, LED lights have a number of advantages over incandescents.

Benefits

More energy efficient - Use up to 95% less energy. C7 bulbs use 100 times more energy and mini-lights use 10 times more energy.

Longer lasting - Up to 10 times longer (100,000 hours or 11 years).





Safer - Bulbs don’t heat up so they’re cool to the touch and won’t dry out a natural tree.

Sturdier bulbs - LED bulbs are made of plastic so there’s no glass bulbs to break. Some are sealed from moisture to prevent bulb damage.

Easy-to-use - Up to 20 strings can be connected end-to-end without overloading a typical household’s electrical circuit. If a bulb burns out, the other bulbs stay lit.

The true cost

LED lights come in many colors and costs can vary by color, with blue and white being the most expensive. Although LED lights have a higher initial cost (starting at \$7 for a 35-light string), the amount saved in energy costs outweighs the initial purchase price. When you compare the cost to purchase and operate the lights over five years (see chart below), the savings are clear.

	Bulb type	Watts per bulb	Bulbs per string	*Annual electric cost
	C9	7	25	7.65
	C7	5	25	5.46
	Mini	0.4	100	1.75
	LED	0.09	60	0.23

* Based on one string burning an average of 8 hours per day for 45 days.
 * Costs vary depending on number of strings and how long the strings are lit.
 * Based on 12 cents per kilowatt-hour.

(continued on reverse side)

What to look for

If you plan to use them outside, read the box to make sure they are rated for outdoors. Look for lights that have at least a two-year warranty and are UL labeled.



Where to buy

LED holiday lights are available in many styles and colors from twinkle lights to globe lights, icicle lights to rope lights. Retailers are selling outdoor holiday decorations such as trees, snowflakes and reindeer in LEDs also. LED Christmas lights have been seen locally at these retailers:

- Ace Hardware Stores
- Dorn's True Value Stores
- Gemini Landscaping
- Home Depot
- Menards
- Target
- The Bruce Co.
- Walgreens
- Wal-Mart
- Reinders