



Low-Wattage T8 Fluorescent Lamps



“I was impressed by the ease of switching to low-wattage lamps. There was no need to change any wiring with this lamp-for-lamp replacement, so we were able to do the work with our own staff. The teachers have been very happy with the results from our low-wattage T8 lamps.”

Craig Hamblin
Facilities Supervisor
River Delta Unified School District



Low-Wattage T8 Fluorescent Lamps provide a quick and simple solution to cut your energy consumption. You can save up to 20% of your lighting costs by replacing your existing 32 Watt T8s with low-wattage T8s. If your current lighting system uses 34 Watt T12 fluorescent lamps with magnetic ballasts, you can save up to 47% of your lighting costs by installing low-wattage T8s with electronic ballasts.

Low-wattage T8s are offered in both 25 Watt and 28 Watt versions. PG&E is working with lighting distributors to promote these lamps as one of the many options available to help customers reduce energy costs. Check with your lighting distributor for more information.

ADVANTAGES

Simple Replacement for existing T8 Lamps

Low-wattage T8s will fit in place of your existing 4-foot T8 lamps. Customers with 32 Watt T8s and Instant Start ballasts can start conserving energy immediately.

Maximum energy savings

Save up to 20% of energy costs by replacing 32 Watt T8s with low-wattage T8s. When replacing 700-series 32 Watt T8s:

- 25 Watt T8s provide 20% energy savings with 9% light output reduction
- 28 Watt T8s provide 12% energy savings with 2% light output reduction

When replacing 800-series 32 Watt T8s:

- 25 Watt T8s provide 20% energy savings with 16% light output reduction
- 28 Watt T8s provide 12% energy savings with 9% light output reduction

While low-wattage T8 lamps may reduce light output, changes in light levels of less than 10% are generally undetectable to most occupants.

Better Color Rendering

The improved color of low-wattage T8s can provide light that portrays colors more accurately.

Long Life

Low-wattage T8 Lamps are available in Long Life and Extra Long Life, with average rated lamp life ranging between 18,000 and 36,000 hours. Longer lifetimes extend the relamping cycle, reducing maintenance and disposal costs.

HIGH COLOR TEMPERATURE LAMPS PROVIDE ENHANCED LIGHT OUTPUT

Recent studies indicate that people perceive greater light output from a higher color temperature lamp, such as the 850 series T8 lamp. Customers using 850 (5000K) low-wattage T8s in place of their existing 3500K or 4100K 32 Watt T8s have been able to reduce the energy consumption of their lighting and increase or maintain the perceived light level.

Ask your lighting professional or distributor for more information about high color temperature lamps or spectrally enhanced lighting.

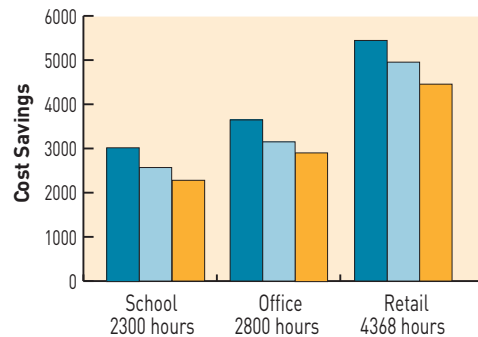
Low-Wattage T8 Fluorescent Lamps



Take advantage of this cost effective solution to lower the energy use in your facility by up to 20%.

In the example given below, low-wattage T8s will save from \$300 to \$1,100 annually over 32W T8s in 100 three-lamp fixtures.

Annual Energy Cost Comparison of 100 3-lamp T8 Fixtures



3-lamp T8 fixtures with standard electronic ballasts
Energy savings estimated at average KWH rate of \$0.15.

■ 32 Watt T8 ■ 28 Watt T8-12% savings ■ 25 Watt T8-20% savings

Customers with T8 lamp systems that are several years old can also consider upgrading to high-efficiency electronic T8 ballasts. These ballasts offer additional energy savings and performance improvements.

GREATER ENERGY SAVINGS FOR EXISTING T12 FLUORESCENT SYSTEMS

The energy savings are even greater for conversion from a T12 fluorescent system. Be aware that conversion from a T12 fluorescent system to any type of T8 system will also require the installation of new electronic ballasts. These retrofit options offer similar lumen output and energy savings of up to 47% for a typical 2 lamp 34 Watt T12s with magnetic ballast.

	Lumen Output	Energy Consumption
34 Watt T12 with standard magnetic ballast	100%	100%
28 Watt T8 with efficient electronic ballast	99%	58%
25 Watt T8 with efficient electronic ballast	92%	53%

This comparison is based on low ballast factor, instant start T8 ballasts.

When converting from a T12 system, consult a lighting professional or your lighting distributor for assistance in identifying the best retrofit option.

CHOOSE THE CORRECT APPLICATION FOR LOW-WATTAGE T8 LAMPS:

- Generally low-wattage T8s operate properly in temperatures above 60°F and are not recommended for low temperature applications
- Low-wattage T8s are intended to operate on Instant Start ballasts and specifically designed Program Start ballasts
- Low-wattage T8s are incompatible with:
 - Dimming ballasts
 - Rapid Start ballasts unless Open Circuit Voltage is 550V or greater
- When relamping on existing ballasts, test lamp and ballast compatibility before proceeding with complete project

If unsure of the correct application, consult with a lighting professional or distributor to determine compatibility with your lighting system.



OPTIMIZING THE ENERGY EFFICIENCY OF YOUR BUSINESS REDUCES YOUR ENERGY COSTS AND BENEFITS THE ENVIRONMENT BY CONSERVING OUR NATURAL RESOURCES AND REDUCING AIR EMISSIONS.



"PG&E" refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. © 2007 Pacific Gas & Electric Company. All rights reserved. These offerings are funded by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission.

© 2006 Pacific Gas and Electric Company. Printed on recycled paper using soy-based inks

Rev. October 2007 C-1552