



# The sustainable choice

Optanium® high-efficiency ballasts for today's T8 lighting needs

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## A renewed focus on energy

Across the country today, businesses are taking a much closer look at ways to conserve energy and save money. And, as lighting accounts for up to 40% of a typical commercial facility's electricity consumption<sup>1</sup>, it's not surprising that it's one of the first places businesses turn to help reduce their rising energy costs.

Sustainable lighting solutions such as Philips Advance Optanium high-efficiency electronic ballasts for T8 lamps can help businesses significantly reduce their lighting costs. But they also help companies meet the changing needs of today's environmentally focused and cost-conscious marketplace.

New legislation is requiring lighting systems to meet increasingly strict performance levels, and regulations at the state and local level are following suit. In addition, building a reputation for following sustainable business practices that minimize environmental impact can provide a company with a marketable advantage.

In short, sustainable lighting solutions like Optanium ballasts for T8 lamps deliver the performance businesses demand in today's marketplace.

<sup>1</sup>Source: Department of Energy/Energy Information Administration



## Optanium ballasts — The sustainable choice for T8 environments

Philips Advance Optanium high-efficiency electronic ballasts represent a breakthrough in fluorescent T8 system components. Engineered to optimize lighting performance and maximize energy savings, these innovative ballasts bring sustainable performance to recessed, direct/indirect, or strip lighting applications in virtually any business setting.

Optanium ballasts for T8 lamps are part of our effort to promote environmental responsibility through Smart Solutions™ — energy-efficient products, lighting systems, services, and expertise based on Philips Advance branded ballast technology that help customers improve the bottom line while reducing their carbon footprint.

All of the ballasts that comprise Smart Solutions are designed to offer the highest energy efficiency, longest system life, and lowest total cost of ownership in each product family. To learn more about Smart Solutions, visit [www.philips.com/advance](http://www.philips.com/advance).

Choosing Smart Solutions like Optanium ballasts for T8 lamps means having confidence in lighting solutions that are backed by 60+ years of industry experience and a shared commitment to improving our planet.



# A versatile product family for every T8 application

With a broad range of models available, Optanium ballasts can deliver sustainable performance anywhere T8 lighting is used — offices, cubicle areas, hallways, classrooms, auditoriums, retail/big box showrooms, healthcare, or industrial facilities.

As these different lighting applications can have varying usage patterns, Optanium ballasts are offered with two starting options. For applications involving long, continuous burn hours, such as hallways, retail showrooms, manufacturing areas, and security lighting, Optanium **instant start** models deliver superior performance.

In situations with frequent on/off switching, such as restrooms, supply areas, conference rooms, or anytime occupancy sensors or motion detectors are incorporated, Optanium **programmed start** models optimize lamp life while providing the same efficiency as the instant start models.

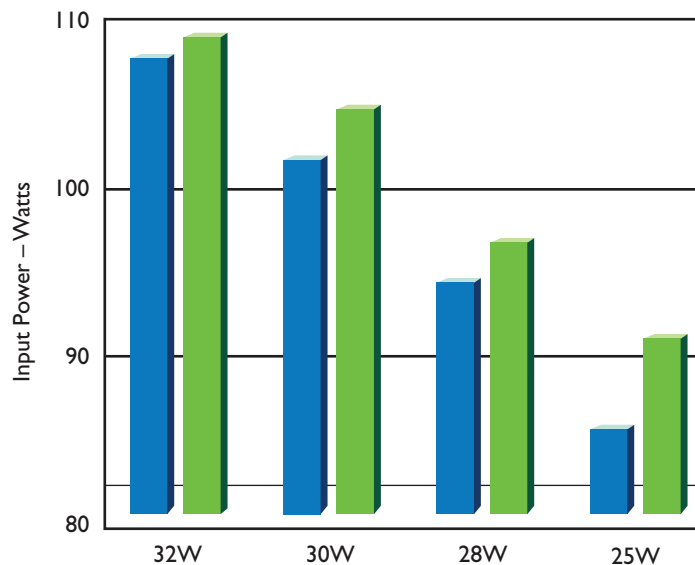
All Optanium ballasts are fully compatible with most major lamp brands, reliably driving 1–4 standard (17W, 25W, 32W) or energy-saving (25W, 28W, 30W) lamps. And, for additional flexibility, they are available in low, normal, and high ballast factor versions.

## Maximizes efficiency for the latest lamp technologies

Optanium’s incorporation of constant-current design maximizes energy savings by optimizing the regulation and maintenance of the input watts consumed by the lamp-ballast system (see chart below). And, as new lamp technologies are introduced (most likely requiring fewer input watts), Optanium’s use of constant-current design also provides for future savings, enabling users to immediately realize the potential of new energy-saving lamps without reinvesting in new ballast technology.

### Current-Fed vs. Voltage-Fed Ballasts

What’s the difference?



#### Voltage-Fed Ballasts

Using voltage-fed ballasts to operate energy-saving T8 lamps provides slightly higher light output, but consumes additional energy to do so.

#### Current-Fed Ballasts

Current-fed ballasts, like Optanium, provide the nominal light output required to operate the lamp, ensuring energy savings are realized when paired with energy-saving lamps.

# Helping businesses meet green building standards

With public awareness of the need for sustainable lighting solutions continuing to rise, the specification of energy-efficient lighting and NEMA Premium components is becoming more and more common among architects, lighting designers, and facility managers alike.

Since Optanium ballasts can be used in such a variety of applications throughout a facility, they can potentially help businesses achieve their environmental and sustainability goals, including LEED certification, meeting ASHRAE standards, and complying with federal, state, or local environmental regulations.

For more information on how the market is moving toward energy-efficient solutions, visit [www.philips.com/advance](http://www.philips.com/advance) and click on the “Sustainability” tab at the top of the page.

## Setting industry standards for ballast efficiency



As a charter product in the NEMA Premium® Ballast Program, Optanium ballasts are recognized as supporting energy-efficient lighting objectives. The National Electrical Manufacturers Association (NEMA) has created this program to help lighting professionals and end users recognize the market's highest-performing ballast products. For more information on the NEMA Premium Ballast Program, visit [www.philips.com/advance](http://www.philips.com/advance) and click on the “Sustainability” tab.

As a licensee in the NEMA Premium Ballast Program, Philips Lighting Electronics has determined that these products meet the NEMA Premium specification for premium energy efficiency.



# Reduce energy costs with unsurpassed efficiency

Optanium's energy efficiency is the result of extensive research and development by Philips Advance engineers working with real-world lighting applications. State-of-the-art electronics enable Optanium ballasts to deliver the ideal balance of light output and energy utilization.

## Magnetic T12 vs. Optanium T8

It's easy to see how these ballasts can deliver significant energy savings while still providing the desired or required light output.

System	System watts	Annual cost to operate <sup>2</sup>	Annual savings per fixture
4-lamp fixture with magnetic ballast and energy-saving T12 lamps	172	\$68.80	
4-lamp fixture with Optanium low watt electronic ballast and 25W T8 lamps	76	\$30.40	<b>\$38.40</b>

This replacement system also represents an estimated **56%** reduction in energy consumption.

If a facility has 1,000 4-lamp fixtures with magnetic ballasts and T12 lamps, that's **\$38,400** in potential savings lost each year.

Put another way, that company is losing **\$105.20** each day it waits to upgrade.

## Standard T8 vs. Optanium T8

Optanium ballasts also save energy costs over standard T8 electronic ballasts, especially with lower-wattage energy-saving lamps.

System	System watts	Annual cost to operate <sup>3</sup>	Annual savings per fixture
4-lamp fixture with standard electronic ballast and F32T8 lamps	112	\$44.80	
4-lamp fixture with Optanium low watt electronic ballast and 25W T8 lamps	76	\$30.40	<b>\$14.40</b>

This replacement system also represents an estimated **32%** reduction in energy consumption.

<sup>2</sup>Comparison based on a fixture with (4) F34T12 lamps and (1) magnetic ballast vs. (1) high-efficiency low watt electronic T8 ballast (IOPA-4P32-LW-SC) w/ (4) 25W energy-saving lamps. Savings based on \$0.10 per kWh, 4,000 hours/year.

<sup>3</sup>Comparison based on a fixture with (4) F32T8 lamps and (1) standard electronic ballast vs. (1) high-efficiency low watt electronic T8 ballast (IOPA-4P32-LW-SC) w/ (4) 25W energy-saving lamps. Savings based on \$0.10 per kWh, 4,000 hours/year.



# Additional Optanium features

Optanium ballasts include a variety of additional features that make integrating sustainable lighting in any fixed-output T8 application quick and easy.



Feature	Benefit
IntelliVolt® technology	Allows the ballast to operate at any input voltage from 120–277V, 50/60 Hz, which simplifies ordering, inventory, and installation
Striation-reduction technology	Reduces the likelihood of striation often associated with energy-saving lamps, ensuring consistent light output
Cold temperature lamp ignition using standard T8 lamps: <ul style="list-style-type: none"> <li>• Programmed start = 0°F (-18°C)</li> <li>• Instant start = -20°F (-29°C)</li> </ul>	Brings energy-efficient T8 performance to a variety of new applications such as parking garages, warehouses, and cold storage areas
Operation between 42Hz and 52Hz	Eliminates interference with infrared systems, anti-theft devices, or other electronic equipment
Arc-reduction technology — UL Type CC*	Provides greater flexibility to meet end-user application requirements

\*Not available in IOPA models

## Delivering the performance today's marketplace demands

From rising energy costs to increasingly strict efficiency standards and the need to reduce their impact on the environment, business owners and facility managers are looking for economical and sustainable solutions to their lighting needs.

Philips Advance Optanium T8 electronic ballasts deliver all the benefits of the latest high-efficiency ballast technology that help improve bottom-line profitability, meet new energy regulations, and provide higher-quality light throughout any facility.

Contact your Philips Lighting Electronics representative today to learn more about our industry-leading Optanium line of high-efficiency ballasts for T8 lamps or visit [www.philips.com/advance](http://www.philips.com/advance) for more information.





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