



The power behind today's lighting designs

Electronic HID: Driving performance in specification

PHILIPS
ADVANCE

Unlocking the performance potential

Electronic high intensity discharge (eHID) lighting is becoming an increasingly popular choice for lighting engineers, designers, and specifiers. With crisp, white light, long system life, compact designs, and exceptional energy efficiency, eHID solutions are finding their way into a wide array of lighting applications.



The ballast behind your luminaire is unseen, yet crucial to the success of your lighting specification.

With the variety of new lamp styles and luminaires available, the creative options are practically limitless. But, there's one component that has a significant impact on the overall performance of the system, no matter which lamp or luminaire you specify.

Your customers will probably never see this element of the system, and some lighting designers may be unaware they even have a choice in the matter, but without this critical component, there'd be no light at all. It's the ballast — and choosing the right ballast is the only way to ensure your customers will enjoy the full benefits of your specified eHID lighting solution.





Ballast selection is just as important as your luminaire

When you specify a lamp and luminaire, you're matching the performance characteristics of each component to specific application requirements. Choosing the ballast in your system is no different, which is why it's equally important to understand the performance characteristics of the ballasts available today.

Think of the ballast as the "heart" of an HID luminaire. At the most fundamental level, the ballast performs two critical functions: transforming the incoming line voltage to start the lamp, and controlling the lamp's operating current once started.

As solid-state electronic technology replaces traditional magnetic core-and-coil constructions, eHID ballasts are playing an even greater role in overall system performance as the "brains" of the luminaire. It's no longer a one-size-fits-all proposition.

eHID technology allows today's ballasts to deliver increased energy efficiency and longer system life, promoting environmental sustainability, and it does so in a lighter, more compact package, allowing greater flexibility in luminaire design and application.

The compact size and quiet operation of eHID ballasts, combined with the introduction of ceramic metal halide lamps, have taken HID lighting systems beyond the high bay realm and into a variety of applications, including retail, commercial, and outdoor environments.

By taking the time to specify the ballasts in your lighting solutions, you're ensuring your customers will receive all the benefits eHID has to offer. The choice really is yours, and it should be Philips Advance.



With a long, dependable service life and a high level of efficacy, eHID lighting solutions by Philips Lighting Electronics can provide a lower total cost of ownership via reduced energy consumption and less required maintenance.

Lighting the way to improved sustainability and legislative compliance

Lighting can account for up to 20% of all electricity usage¹, and as such, it's an excellent opportunity to reduce energy consumption and lessen our impact on the earth. As more and more building owners and managers look to achieve certification through the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™, Philips Lighting Electronics' broad line of energy-efficient solutions makes it easy to specify sustainability with style.

In addition to the environmental benefits of reducing their carbon footprint, lighting systems utilizing Philips Advance ballasts can help your customers meet changing government regulations.

- The Energy Policy Act (EPAAct) 2005 set new standards for lighting efficiencies in residential and commercial buildings nationwide. Our eHID lighting solutions can help your customers comply with these regulations and qualify for the tax deductions offered through this legislation.
- eHID solutions by Philips Lighting Electronics can also help your customers comply with ASHRAE lighting standards, California's Titles 20 and 24, and the Energy Independence and Security Act of 2007.

Maximize your lighting system performance with Philips Advance ballasts

For more than 60 years, Philips Lighting Electronics has focused on one thing: making the best ballasts in the industry. By working closely with fixture manufacturers, lighting engineers, and end users, we've developed solutions that help you meet your customers' needs by addressing the issues they face every day — operational costs, energy efficiency, productivity, and environmental responsibility.

Consider the key advantages ceramic metal halide eHID lighting systems powered by Philips Advance ballasts have to offer your applications:

- **Sparkling white light** — Ceramic metal halide lamps and eHID ballasts boast color rendering indices as high as the mid 90s. In retail settings, this brings merchandise to life with sharp, vivid color that really pops. Whether it's clothing, produce, jewelry, or home furnishings — vibrant, attractive, and accurate color is essential to driving sales.
- **Enhanced color control** — Philips Advance eHID ballasts operate a lamp at a true constant wattage to deliver the most consistent color and light output possible.
- **Sleek, low-profile design** — Developments in electronic technology have enabled the design of smaller, less obtrusive ballasts. This, in turn, has opened the door for luminaire manufacturers to create sleek, low-profile fixtures that offer greater flexibility for lighting design.
- **High efficacy** — With efficacies as much as seven times higher when comparing lumens per watt consumed, eHID ballasts and ceramic metal halide lamps can deliver significant cost savings vs. halogen alternatives².
- **Long life** — Offering up to 20,000-plus hours of rated average life², ceramic metal halide eHID systems can last up to seven times longer than incandescent alternatives.

¹Source: www.enr.com, Environmental News Network, "Let there be light— for the next 35 years: the green gift that keeps on giving" Dec. 4, 2007

²Source: Philips Lighting Lamp Specification and Application Guide 2006 (SAG-100)

Finding the right eHID lighting system solution is easy with Philips Lighting Electronics

Offering a wide variety of eHID ballasts and systems for both indoor and outdoor applications, we give you the flexibility to specify the ballast or ballast and lamp system that best meets your design specifications.

e-Vision® ballasts

The e-Vision family of low-wattage eHID products delivers exceptional value for a wide array of applications, including:

- Retail displays and accent lighting (both track and downlights)
- Lobbies
- Atriums
- Landscape and facade lighting

With simplicity in mind, many of our eHID ballasts include our exclusive IntelliVolt® multiple-voltage technology, which allows the system to operate at any voltage from 120V to 277V. This not only provides exceptional design flexibility, it simplifies the specification process and ensures your luminaires will have maximum compatibility on the jobsite.

e-Vision ballasts are available in a variety of enclosure styles to accommodate the latest fixture designs, and all e-Vision enclosures feature metallic construction for improved thermal management.

MasterColor® systems

Pairing Philips Advance e-Vision ballasts with Philips MasterColor lamps provides a powerful combination of crisp, white light and energy efficiency superior to what halogen options can offer. Leading the way in versatility and energy efficiency:

- Mini MasterColor 20W and 39W systems are among the smallest ceramic metal halide systems

available in the retail lighting arena, making them ideal for use where high impact is required within a small footprint.

- MasterColor Elite 39W and 70W systems are an optimal choice for a variety of accent and downlight applications in retail. A step above existing CDM offerings, these systems provide outstanding light quality, long, dependable life, and a lower cost of ownership.
- MasterColor Elite MW (medium wattage) systems offer a long-lasting, bright white solution for indoor or outdoor applications ranging from high bay to architectural to roadways to public spaces and parking garages. With color-popping, high lumen-per-watt output and maintenance, this energy-efficient CDM system is especially ideal for retail spaces and beyond.

CosmoPolis™ system

The CosmoPolis system represents the future of white outdoor light for urban spaces. This advanced system is helping municipalities revitalize their urban landscapes with crisp, welcoming white light that provides better overall visibility and quicker identification of people and surrounding objects. From roadways to walkways, college campuses to pedestrian malls, CosmoPolis is ideal for creating attractive and functional outdoor settings, and it uses considerably less energy than antiquated magnetic HID lighting solutions.



DynaVision® ballasts

DynaVision ballasts drive 320W, 350W, and 400W pulse-start metal halide lamps for retail, manufacturing, and institutional applications. The microprocessor technology provides an array of benefits over magnetic HID ballasts, including:

- Superior lumen maintenance
- Up to 40% lower energy costs
- Up to 50% lower lamp maintenance costs
- IntelliVolt multiple-voltage technology (200–277V, 50/60 Hz) simplifies ordering and reduces SKU requirements

DynaVision ballasts feature 0 to 10V dimming with an automatic 15-minute warm-up, which provides continuous dimming down to 50% lamp power and the opportunity for additional energy savings through

daylight harvesting and occupancy sensing. They also include an integral 120V output, which automatically controls a quartz standby lamp up to 250W.

PLUS 90 protection®

Philips Advance eHID ballasts are covered by our exclusive PLUS 90 Protection — the industry's most comprehensive lamp/ballast system warranty that gives your customers:

- Freedom from concern about warranty coverage on their lighting systems
- 90 days' additional protection on both the lamp and ballast over any system warranty as published by the major lamp manufacturers
- Freedom to pair our ballasts with lamps from any manufacturer

Delivering the future of eHID today

There's no question that eHID represents a solid platform for future development in lamp, ballast, and luminaire design. Whether indoors or out, from high bay to accent, parking garages to roadways, to city centers and beyond, eHID lighting systems offer great improvements in design flexibility, light quality, dependable service life, and energy efficiency.

For optimal lighting system performance, ballast selection is key, and the choice is yours. With a 60-year-plus legacy in the ballast industry, Philips Lighting Electronics is committed to delivering the broadest range of innovative eHID solutions for your varied applications. And you can specify our ballasts with confidence, knowing that we stand behind our products with the best warranty in the business.

There's a bright future for eHID technology, and we'd like to help you discover its possibilities. Contact your Philips Lighting Electronics representative today to learn how our eHID ballasts and lighting systems can drive optimal performance in your specifications.



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