

Energy-efficient lighting for industrial and commercial applications

Philips GreenPerform LED Highbay



PHILIPS

sense and simplicity

Illuminate your business. And your bottom line

Today's businesses operate in an increasingly competitive landscape. To stay ahead, leaders are looking for new ways of doing things. New efficiencies. New lines of profitability.

In short, new ways of doing more – for less.

In the industrial, warehouse and commercial arenas, this translates into reducing the amount of energy you use for lighting. The end goal? To create savings for your business.

Philips developed the GreenPerform LED Highbay luminaire to replace traditional 250 W and 400 W High-intensity discharge (HID) Highbays. This advanced, lighting system can deliver remarkable energy savings of up to 60%.

Philips GreenPerform LED Highbay creates a safe and comfortable working environment. It enhances operational efficiency, maximizes individual performance and works wonders for your bottom line.



Lighting solutions that benefit business

With Philips GreenPerform LED Highbay, factory owners have an industrial lighting solution that makes a valuable contribution to the profitability of their business, providing both operational and maintenance cost savings.

By reducing energy consumption, this solution also contributes to a lower carbon footprint. What's more, consistent brightness to the end of the lighting lifecycle continually provides the right levels of light, guaranteeing safe and comfortable working conditions for employees.

No matter what your requirements, these reliable systems are easy to install and designed to minimize downtime in operations.

A wide range of applications



Industrial

Ideally suited to industrial applications such as production areas, assembly halls, cold storages, warehouses, logistic centers, and food processing facilities.

Commercial and convention

Designed to perform exceptionally well in large-scale, specialized retail settings, shopping centers, convention centers and airports.



Public areas

May also be used in public spaces such as gymnasiums and sports arenas.



The flexible, efficient lighting system

Philips GreenPerform LED Highbay delivers simple, point-to-point replacement of 250 W and 400 W HID Highbays with three easy installation methods. They offer the flexibility to be installed by hook, pendant or bracket.

Once the system is up and running, you can expect energy savings of up to 60%. Downtime is reduced too; in the event of a power failure they turn on instantly, compared to the slower warm up of traditional HID lamps.

You will enjoy exceptionally high-performance in a range of applications. There are three beam shapes to choose from and the high-rack optics are engineered to illuminate vertical planes with exceptionally high accuracy.

Why Philips GreenPerform LED Highbay?

Benefits

- One-to-one replacement of 250 W and 400 W HID systems with energy savings of up to 60%
- High lumen output with 95% optical efficiency
- Product reliability (IP65 protection) and long lifetime (50,000 hrs)
- Flexibility in various applications, easy and secure installation

Features

- New LUXEON® M high lumen output chips
- Advanced optical design and performance
- Unique flat design for efficient heat dissipation
- Choice of 3 beam shapes and 3 multiple installation options



High-performance lighting at a glance



BY618P

- One-to-one replacement to metal halide 400 W luminaires
- 21,000 lm system lumen output
- 210 W @ 100 lm/W
- Lumen-maintenance 70% at 50,000 hrs



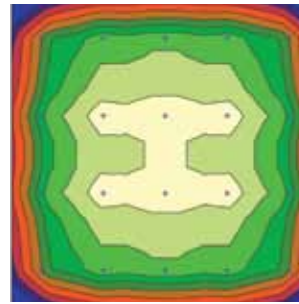
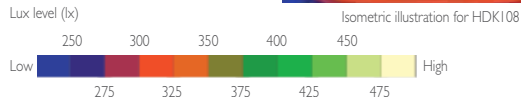
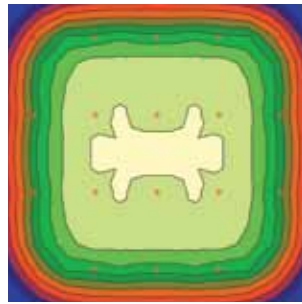
BY619P

- One-to-one replacement to metal halide 250 W luminaires
- 11,000 lm system lumen output
- 110 W @ 100 lm/W
- Lumen-maintenance 70% at 50,000 hrs

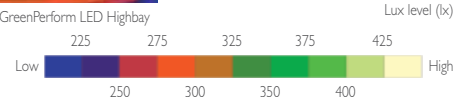
A simple switch with your existing highbays

The Philips GreenPerform LED Highbay is designed to offer convenient one-to-one replacement of traditional HID systems. It also delivers improved performance with substantial energy and cost saving.

**Highbay
(HDK108 400 MH WB)**



**GreenPerform LED Highbay
(BY618P LED200/NW WB)**



Compared to traditional HID systems, Philips GreenPerform LED Highbay delivers higher lumen output and uniformity level. This means increased light levels and more even distribution of light in the area space, which reduces shadows and provides better visibility for users.

Categories	HDK108 400 W WB	GreenPerform LED Highbay (BY618P LED/200/NW WB)
Quantity of luminaires	20 pcs	20 pcs
Average Lux	347 lx	383 lx
Uniformity	0.55	0.55
Power	425 W	210 W
Connected Load	9.5 W/m ²	4.5 W/m ²

For a room with dimensions: L = 30 m, W = 30 m, H = 7 m, Mounting height = 6.5 m.
For illustration purpose only.

The energy-saving highbay

Philips GreenPerform LED Highbay delivers significant energy savings of up to 60%. This is due to the lower power consumption of LED lighting and the unique design effectively minimizes driver/ballast power loss.

Comparison between HID vs LED system	HDK108 400 W WB	GreenPerform LED Highbay (BY618P LED200/NW WB)
Luminaire type	HPI (400 W)	LED (210 W)
Lamp source	400 W	210 W
Number of luminaires	20	20
System power	425 W	210 W
Annual operating hours*	5,400 hrs	5,400 hrs
Power consumption per day	153 KWh	75.6 KWh
Annual power consumption	45,900 KWh	22,680 KWh
Energy savings (up to)	60%	

*Based on 18 hours per day, 6 days a week, 50 weeks a year
For illustration purpose only.



Cutting-edge optical design and leading-edge performance

LUXEON® M technology means Philips GreenPerform LED Highbay are state-of-the-art. With up to 1,000 lumens from a single emitter, each incorporating Polymethylmethacrylate (PMMA) lens technology,

they are more efficient, more reliable and last longer. This advanced design means you can look forward to high lumen performance with 95% optical efficiency.

Philips LED Efficacy > 120 lm/W due to LUXEON® M

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PMMA lens technology of extremely high light usage

High flux density and efficacy

LUXEON® M emitters are illumination grade LEDs designed to enable outdoor and industrial applications optimized either for high efficiency or low cost. With *Freedom From Binning* and leading performance, LUXEON® M emitters deliver high efficacy and high flux density from a uniform source with tight correlated color temperature control.



Flexible modular design

LUXEON® M emitters are applied in modular designs that offer the versatility to be fine tuned in order to deliver precise levels of illumination performance. They may also be optimized for both efficacy and cost, thus catering for product differentiation.



Smart, energy-efficient lighting now and in the future

The patented, slim-line design is smaller and lighter for easier installation and more freedom in applications. By cleverly increasing airflow through the housing, the design also prevents dust accumulation and makes cleaning much easier.

Flat design significantly reduces the size and weight of luminaires and offers more freedom in applications.

60 mm for BY618p
50 mm for BY619p



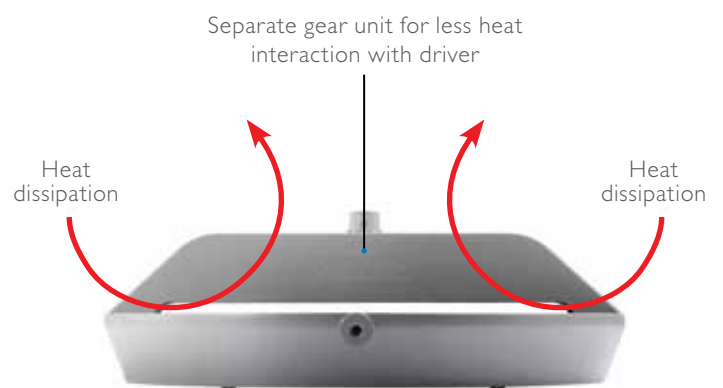
Patented design creating air flow through the housing prevents dust accumulation and is suitable for installation at any angle.

IP65: Dust penetration-protected and jet proof (ideal for hose-spray cleaning).



Breakthrough thermal management

Philips GreenPerform LED Highbay can be used in a wide range of ambient temperatures from -30 to +45 °C. With its revolutionary thermal management design, featuring a separate gear unit for less heat interaction with the driver, it delivers more efficient heat dissipation which contributes to its long lifetime of up to 50,000 hours at 70% lumen maintenance.



Future-proofed design

As environmental issues become more pressing, energy saving and carbon emission reduction is rapidly moving from a social responsibility to a legal obligation. Which is why Philips GreenPerform LED Highbay helps you save energy and remain compliant today and tomorrow. Thanks to in-built flexibility, you will be able to extract even more energy savings in the future.

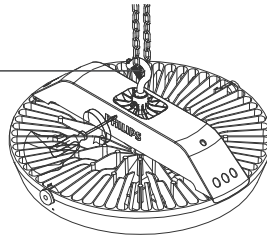
Greater freedom in applications

The distinctive and efficient flat design of Philips GreenPerform LED Highbay, combined with a range of mounting options, gives you the flexibility to choose the most suitable application for your business.

You can select hook or pendant mountings on ceilings. Alternatively, dedicated bracket accessories give you the option to install on inside walls and outdoor sites.

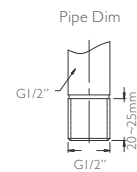
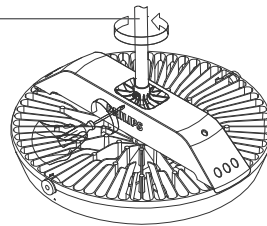
Hook (Suspension)

Hook Mounting



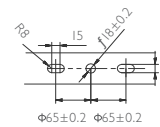
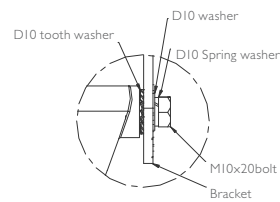
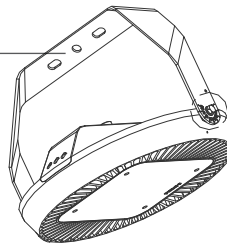
Pendant (Pipe*)

Pipe Mounting



Bracket (Wall mounting only)

Bracket Mounting

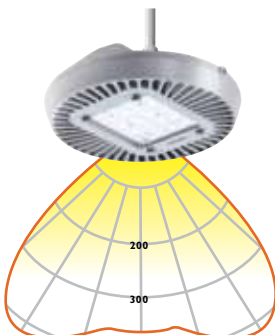


*Hook & bracket sold separately. Please contact your local Philips representative for pipe accessory.

Choice of three beams to suit your requirements

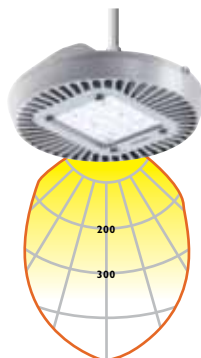
Wide Beam

- Wide delta-shaped
- Rotational symmetric
- For large open halls
- Ideal distribution for general, open areas



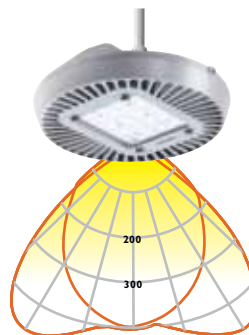
Narrow Beam

- Narrow delta-shaped
- Rotational symmetric
- For large open halls with ceiling height of >20 m
- Concentrates light downward for higher mounting



HRO Beam

- Narrow and wide
- Bi-symmetric
- For high rack / aisle
- Lights the floor and vertical racks of aisles





GreenPerform LED Highbay specifications

Description		GreenPerform LED Highbay	
Type		BY619P	BY618P
Housing		Small	Big
Dimension (DxWxH)		366 x 374 x 134.7 mm	456.8 x 466 x 150.3 mm
Application		250 W HPI equivalent	400 W HPI equivalent
LED	Light source	18 pcs Lumileds LUXEON® M	34 pcs Lumileds LUXEON® M
	Lumen Output	11,000 lm	21,000 lm
	Color & CCT	CW / NW	CW / NW
	CRI	75	75
Optics	Photometric	Symmetrical	Symmetrical
	Beam	WB, NB, HRO	WB, NB, HRO
	Cover	Tempered Glass	Tempered Glass
Housing Material		Die cast aluminum	Die cast aluminum
Input Voltage		220-240 V ~ 50/60 Hz	220-240 V ~ 50/60 Hz
System Efficiency		100 lm/W	100 lm/W
System Wattage		110 W	210 W
Operating temperature		- 30 °C < Ta < 45 °C	- 30 °C < Ta < 45 °C
IP rating		IP65	IP65
Classification		Class I	Class I
Lifetime		50,000 hrs L70	50,000 hrs L70
Weight (KG)		5.7	10.0
Installation		Hook / Pendant / Bracket	Hook / Pendant / Bracket
Approbation		CCC, CB, EMC	CCC, CB, EMC

Accessories

Description	BY619P	BY618P
Hook	Mounting Hook	Mounting Hook
Bracket	BY619Z MB	BY618Z MB

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