# PHILIPS



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# Highbay

Today's high-quality LED lighting is all about flexibility, energy efficiency, and lower maintenance costs. With its long useful life and powerful, flexible options, LED-based lighting systems from Philips illuminate effectively from a height, deliver light on both the vertical and horizontal planes for optimal visibility of racks and shelves, and virtually eliminate lamp replacement, which means fewer operational disruptions.



GentleSpace GreenWarehous





Industrial

### **GentleSpace GreenWarehouse**

# Wireless lighting system, giving you control of energy savings

#### GreenWarehouse system compatible

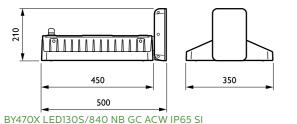
This dedicated system makes it easy for warehouse developers and facility managers to achieve maximum energy savings. It seamlessly integrates state-of-the-art LED lighting with an easy-to-use and reliable networked control solution. When the situation on the work floor changes, settings such as dimming levels and timing can be changed wirelessly by the endusers themselves. Luminaires can be combined in groups across the layout, and re-zoning them does not require a hardware change, thus minimizing commissioning costs. The system delivers savings over and above the actual efficiency of the LEDs and is future-proof. Easy to understand, easy to designin, and easy to use, the GreenWarehouse is simplicity itself.

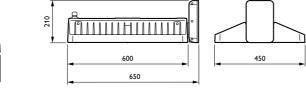
#### Features and Benefits

- Optimal operating costs for a low investment
- One system; works across other Philips product platforms – GentleSpace gen2, Maxos LED and Pacific LED
- Future-proof system: wireless adjustment of lighting settings and fast re-zoning if use of space changes
- Different lighting levels and timings can be set per sensor, group and network of luminaires
- No compromise on operators' safety, well-being and productivity
- Wireless re-zoning by the end-user
- Advanced sensor technology for effective presence detection, even from a great height
- The system is suitable for both new builds and retrofit installations
- Dedicated warehouse kits; via bundled orders

#### **Product size**

All dimensions in millimeters





BY471X LED170S/840 NB GC ACW IP65 SI

70Khrs Up to 121 lm/W

Technical parameters	
Туре	BY470X (13,000 lm version) BY471X (17,000 and 25,000 lm versio
Light source	Philips Fortimo LED Line 1R
Power	BY470X: 108 W BY471X: 136 and 205 W
Luminous flux	BY470X: 13,000 lm BY471X: 17,000 and 25,000 lm
Correlated Color Temperature	4000 K
Color Rendering Index	> 80
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours
Median useful life L90B50	25,000 hours
Average ambient temperature	25 ℃
Driver failure rate	0.5% per 5000 hours
Driver	Built-in
Mains voltage	230 or 240 V / 50-60 Hz
Mains Voltage	,
Dimming	Dimmable (PSD)
Dimming	Dimmable (PSD)
Dimming Controls system input	Dimmable (PSD) DALI Housing: die-cast aluminum Optic:PMMA
Dimming Controls system input Material	Dimmable (PSD) DALI Housing: die-cast aluminum Optic:PMMA Cover: glass, tempered Silver grey (SI), white (WH)
Dimming Controls system input Material Color	Dimmable (PSD) DALI Housing: die-cast aluminum Optic:PMMA Cover: glass, tempered Silver grey (SI), white (WH) Other RAL colors available on reque Narrow beam (NB) Medium beam (MB) Wide beam (WB)
Dimming Controls system input Material Color Optic	Dimmable (PSD) DALI Housing: die-cast aluminum Optic:PMMA Cover: glass, tempered Silver grey (SI), white (WH) Other RAL colors available on reque Narrow beam (NB) Medium beam (MB) Wide beam (WB) High-rack (HRO)
Dimming Controls system input Material Color Optic Optical cover	Dimmable (PSD) DALI Housing: die-cast aluminum Optic:PMMA Cover: glass, tempered Silver grey (SI), white (WH) Other RAL colors available on reque Narrow beam (NB) Medium beam (MB) Wide beam (WB) High-rack (HRO) Glass cover (tempered, clear); option Y-grippel

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Industria

LED

### **GentleSpace gen2**

The new standard in industrial high-bay lighting, combining functionality with design

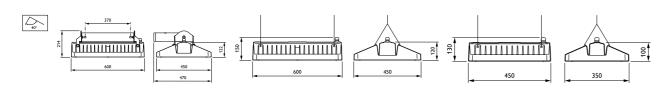
With the introduction of the GentleSpace LED luminaire in 2011, Philips achieved a breakthrough in high-bay lighting, offering a huge reduction in power consumption, a long service life and an innovative design. Now, with GentleSpace gen2, Philips continues to improve even further: an improved total cost of ownership, even in extreme conditions with the the GS-2 Xtreme version, which can be used up to +60°C or 100,000 hrs of lifetime (L80), both ensured by an integrated over-heat protection. In addition, a wide variety of options – e.g. optics, coatings, mounting possibilities, cover materials and suitable for explosive zones 2/22 – are available to ensure an ideal solution for your application. Additionally, the GentleSpace gen2 can be equipped for use in a central emergency grid (PSED).

#### Features and Benefits

- Extremely favorable total cost of ownership
- Customizable for high diversity of applications
- Proven reliability
- Improved efficiency of up to 143 lm/W
- DALI-addressable for further energy savings (250S and 320S require two DALI addresses)
- Extremely long lifetime of up to 100,000 hours (XT version)
- Improved thermal management to withstand ambient temperatures up to 60 °C (XT version)
- Iconic design for architectural appeal
- Small surface makes it possible to meet ESFR sprinkler requirements
- Fully compliant with EN-12464-1; low glare rating and color rendering of  $\geq 80$
- Suitable for new builds or point-for-point replacement of HPI 250W, HPL 400W or HPI 400W, reducing energy consumption by up to 60%
- Wide variety of optics, including asymmetrical for side-lit applications (ideal for indoor sports halls and industry) and very narrow beams for industrial halls up to 40 meters
- Polycarbonate or PMMA cover available for use in food industry

#### **Product size**

All dimensions in millimeters



GentleSpace gen2 BY470P/BY471P

GentleSpace gen2 BY470P/BY471P

GentleSpace gen2 BY470P/BY471P

70Khrs Up to 125 Im/W	
Technical parameters	
Туре	BY470P (13,000 lm version) BY471P (17,000 and 25,000 lm versions)
Light source	Philips Fortimo LED Line 1R
Power	BY470P: 95 W BY471P: 126 and 180 W
Luminous flux	GRN versions: 13,000, 17,000 and 25,000 lm ECO versions: 13,000, 17,000, 25,000 and 32,000 lm XT versions: 17,000 and 25,000 lm
Correlated Color Temperature	4000 K
Color Rendering Index	> 80
Median useful life L70B50	70,000 hours
Median useful life L80B50	50,000 hours For XT version: 100,000 hours at Ta 45° 50.000 hours at Ta 60°
Median useful life L90B50	25,000 hours
Average ambient temperature	25 °C XT version with Ta 60°
Driver	Built-in (self ballasted LED-module)
Mains voltage	220-240 V AC / 50-60 Hz 186-250 V DC
Dimming	Dimmable (PSD)
Controls system input	DALI (25,000 lm version requires 2 DALI addresses) The 25,000 and 30,000 versions require 2 drivers
Material	Housing: die-cast aluminum Optic:PMMA Cover: thermally toughened clear glass
Color	Silver grey (SI), white (WH) Other RAL colors available on request
Optic	Narrow beam (NB) Medium beam (MB) Wide beam (WB) High-rack (HRO) Asymmetrical mirror axis angle 50° (A50)
Optical cover	Glass cover (tempered, clear); optional PC or PMMA cover
Installation	Wall mounting Installation without removing lamps and optic/cover Y-grippel Mounting bracket (optional) External IP65 electrical connector
Accessories	Mounting brackets (BY470Z, BY471Z) Wall mounting bracket
Remarks	The lifetime for up to 100,000 hours (XT version) is valid throughout the whole temperature range of -30°C up to 45 °C External IP65 connector and Y-grippel suspension set are included Overheat protection in XT version to ensure long maintenance-free life

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GreenPerform LED Highbay G3





Industrial

## **GreenPerform LED Highbay G3**

### Energy-efficient lighting

Businesses are constantly looking for ways to reduce the amount of energy required to light their production and warehousing facilities. Philips GreenPerform LED Highbay G3 luminaire generates up to 65% more energy savings compared to HPI-P lighting systems. GreenPerform Highbay G3 also delivers superior light quality, improved optical choices to enable optimum lighting design for different industrial applications.

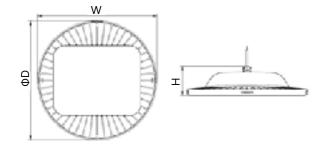
Designed with high-quality optics and a long lifetime, Philips GreenPerform LED Highbay G3 luminaire ensures reliable lighting performance across different applications. Multiple mounting options guarantee easy and secure installation.

#### Features and Benefits

- High energy savings. System efficacy @ 130lm/W, saving up to 65% comparing to HPI-P system
- Superb light quality. Low UGR (NB/20 ~ WB/26) and accurate color (CRI>80)
- Safe and reliable. This luminaire has an IP65/IK07 rating and lifetime 50,000 hours @L70B50
- Easy installation and maintenance. Super slim design and suits for hook, pipe and bracket mounting

#### Product size

All dimensions in millimeters



Туре	D	w	н
BY698P LED110	379	382	96
BY698P LED160	417	418	105
BY698P LED200	452	454	107
BY698P LED300	530	534	120

IP65 50Khrs Up to 130 Im/W

Technical parameters	
Туре	BY698P (LED110/160/200/300)
Lifetime L70B50	50,000hrs @ Ta35°C
Operation Temperature	- 30°C < Ta < 50°C
IP/IK rating	IP65 / IK07
Classification	Class I
Certificate	CB/EMC/SAA/CE/TISI
Installation	Pendant (pole/hook/bracket)
System Lumen	11000lm (Fix), 10000lm (Dali)/ 16000lm (Fix & Dali)/ 20000lm (Fix & Dali)/ 29000lm (Fix & Dali)
Color temperature	CW (6500K)/ NW (4000K)
CRI	CRI>80
Color consistency	<5SDCM
Beam Angle	BY698P LED110 : NB; WB BY698P LED160 : NB; WB BY698P LED200 : NB; WB BY698P LED200 : E-NB; NB
System Wattage	85W, 120W, 155W, 225W
Input Voltage	220-240V, 50/60 Hz
Driver	PSU/PSD
Surge	L,N 2KV; L,N-GND 4KV
Housing material	Aluminum Die-casting
Optical material	Lens Cover: Optical PC
Dimensions	BY698P LED110 : 379mm x 96mm BY698P LED160 : 417mm x 105mm BY698P LED200 : 452mm x 107mr BY698P LED300 : 530mm x 120mi
Weight	BY698P LED110 : 3.2kg BY698P LED160 : 4.2kg BY698P LED200 : 4.7kg BY698P LED200 : 7.5kg

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#### GreenUp Highbay– BY550





Industrial

### **GreenUp Highbay- BY550**

### Energy-efficient lighting

#### GreenWarehouse system compatible

GreenUp Highbay BY550 is a high efficient and reliable LED highbay for industrial high-ceiling facilities without humid and dusty requirement, designed for both new project and retrofit. This lighting system can deliver up to 88% energy savings with the integrated G2 Actimlume Wireless. It delivers point to point replace up to 400W HID and T5 6x54W higbay with easy installation. There are three beam shapes to choose with good light quality CRI85 and UGR 17.

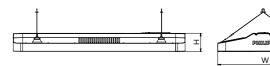
Integrated with G2 Actilume Wireless, GreenUp BY550 provide connected lighting with daylight, occupancy sensor, and ZigBee wireless communication, will increase your savings by upgrading to an intelligent system and delivering one-stop solution for your Factory, Warehouse, Distribution center, Indoor spot hall, and other high ceiling indoor application.

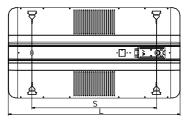
#### Features and Benefits

- Energy savings of fix version up to 75% vs. HID 400W Systems and up to 56% vs.T5 Highbay; Additional up to 13% saving can be achieved from intelligent version ((depends on usage behavior)
- Comfortable light with low glare and accurate color
- Easy to use, easy to design in and low installation cost
- Smart Comfort combined with Actilume 2 wireless
   control (dimmable version)
- Application flexibility (multiple beam)
- High system efficiency (125lm/W)
- CRI 85, UGR 17
- Reliable (70Khrs, Lumileds Chips & Xitanium Driver)
- Wide Beam, Narrow Beam & High Rack Optic Beam
- Unique air convection design enables efficient heat dissipation
- Connected lighting

#### Product size

All dimensions in millimeters





Туре	L	W	н	S
BY550P LED200 PSD BY550X LED200 ACW2	720	380	77	522
BY550P LED140 PSD BY550X LED140 ACW2	720	380	77	522
BY550P LED100 PSD BY550X LED100 ACW2	440	380	77	250

Technical parameters		
Product family	Fix/Dali	Intelligent
Product spec.	BY550P	BY550X
System output	10000/ 13000/ 20000lm	10000/ 13000/ 20000lm
System power	80/ 110/ 160W	80/ 110/ 160W
System efficiency	125lm/W	125lm/W
Control	fixed / DALI	wireless
Lifetime	70000hrs	70000hrs (life time extend to 100000hrs with average 30% dimming down)
Controller	no	ActiLume Wireless DALI Gen2 (effective in 10m)
Sensor	no	ActiLume G2 Indus Sensor H513 (5-13m: effective sensing height)
Control features	no	movement detection, daylight harvest, wireless zoning
ССТ	CW (6500K)/ NW (4000K)	
CRI	>85	
SDCM	<3.5 SDCM	
Optic	WB/ NB/ HRO	
Temperature	-20°C~ 40°C / Ta35°C	
Driver	Philips Xitanium driver	
Materials	body: steel ; cover: engineering plastic ; lens: optic F	PMMA
Color	white	
IP	IP20	
Classification	class I	
Input voltage	220-240V, 50/60 Hz	
Power factor	> 0.90	
Installation	Suspend	

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Industrial

### SmartBright Essential Highbay BY218P

Energy-efficient lighting for industrial and commercial applications

SmartBright Essential Highbay is a high efficient and reliable LED luminaire, designed for industrial application without humid and dust protection requirements. It enables point to point replacement of HID conventional luminaires, and delivers significant energy savings of up to 64% as compared to HID lamp system.

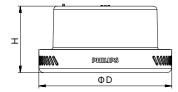
With the innovation of micro prism structure optical plate, it provides an excellent glare control and smooth uniform lighting surface, which effectively improve the comfort of your environment.

#### Features and Benefits

- High energy efficient
- Elegant design
- High quality light effect
- Reliable
- Installation flexibility
- Application flexibility
- System efficacy of 90lm/W
- Micro prism optical plate: Low glare, good uniformity
- · Solid SPCC housing with anti-fire PC cover
- 25,000hrs lifetime @Ta35°C
- Hook, pole installation
- Wide beam; Narrow beam

Product size

#### All dimensions in millimeters







Туре	D	н
BY218P LED50 PSU-60W	231	124
BY218P LED90 PSU-100W	277	139
BY218P LED180 PSU-200W	369	147



Technical parameters	
Туре	18000lm
System Power	200W
System efficacy	90lm/W
ССТ	CW (6500K)/ NW (4000K)
CRI	>75
Color consistence	<5 SDCM
IP rating	IP20
Classification	Class I
Operation Temperature	-20°C ~ 40°C (Ta35°C)
Lifetime (hr)	25,000hrs (L70) @Ta35°C
Optical	WB; NB (with reflector)
Input Voltage	220-240V, 50/60 Hz
Power factor	>0.9
Installation	Pendant (pole/hook)
Dimension	D369XH147
Weight	4.5kgs
Certificate	CB/EMC/AU&NZ/CE
Ontional according	BY218Z RL-L
Optional accessory	200W NB reflector

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9000lm	5200lm
100W	60W
90lm/W	87lm/W
D277XH139	D231XH124
2.4kgs	1.6kgs
BY218Z RL-M	BY218Z RL-S

100W NB reflector

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60W NB reflector

#### Mini500 G2



Mini500 G2

# Energy-efficient lighting for industrial and commercial applications

In a transparent market like petrol station, operators are under constant pressure to maintain its profitability through lower operating cost, while in the same time attracting more customer with clean and crisp station that gives comfort and safety feeling. Philips' Mini 500 LED is an intuitive undercanopy lighting that ensures optimal visual conditions while enabling huge energy savings. The luminaire's precision-control optics enables light to be distributed where it is needed the most. Its integrated components and longlife LED technology make this an easy-to-install, zero-maintenance solution.

#### Features and Benefits

Solid die-cast housing design ensures long fixture lifetime

LED

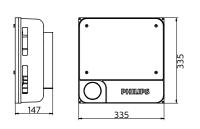
Retail and Hospitality

Industrial

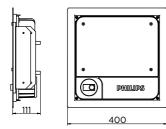
- Increases visibility and safety at night
- Up to 60% energy saving compared to traditional high-intensity discharge lamp solutions
- Easy to install
- Precision-control optics
- Wide Range of option
- Basic on and off PSU
- Basic Dimmable PSR
- Auxiliary Lamp version PSU GU5.3
- Intelligent Version PSD ACD2 IS
- Surface-mounted, Recessed –mounted, Side entry
   Pole mounted version

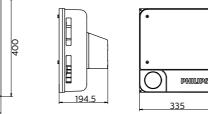
#### Product size

All dimensions in millimeters



Mini500 G2 BBP500/BCP500/BGP500





Mini500 G2 BBP500/BCP500/BGP500 Mini500 G2 BBP5

Mini500 G2 BBP500/BCP500/BGP500

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Technical parameters	
Family Name	BY500B Recessed BY500C Surface BY501W Pole
Ambient temperature range	-30 to 40 °C
Average ambient temperature	35 ℃
Mech. impact protection code	IK07
Ingress protection code	IP65
Input Voltage	220-240
CE mark	CE mark
Protection class IEC	Safety class I
Optical cover/lens type	Tempered glass
Driver included	Yes
ENEC mark	-
Flammability mark	-
Gear	-
Glow-wire test	Temperature 650 °C, duration 30 s
Lamp family code	LED120
Light source replaceable	No
Number of gear units	1 unit
UL mark	-
Initial chromaticy	-
Init. Color Rendering Index	85
Luminous flux tolerance	±7,5%
Initial input power	100

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SmartBright Lowbay





Industrial

### **SmartBright Lowbay**

Brighter spaces with energy-saving lowbays

Perfectly illuminated spaces bring perfect results, whether it's for work or play. Philips SmartBright Lowbay takes industrial, retail, and recreational areas to a whole new level with vibrant, energy-efficient lighting that enhances work performance, elevates shopping experience, and brings one's A-game to any sports activity.

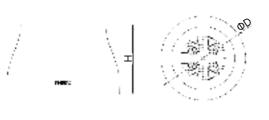
Philips SmartBright Lowbay redefines modern, functional lighting by combining cost-efficiency with elegant design. This solution offers excellent quality light while providing high energy savings, and lets you create the right ambiance with its two classic and stylish designs. Flexible, safe, and reliable, SmartBright Lowbay is the perfect LED replacement to conventional CFL lowbay systems, allowing you to brighten up factories, supermarkets, retail shops, and sports recreational spaces the smarter way.

#### Features and Benefits

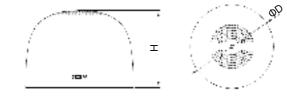
- High energy savings. Lifetime is four times longer than conventional lowbay systems, offering significant energy savings of up to 55%. It can also be a smart LED replacement for metal halogen solutions.
- Comfortable lighting. An optimized lighting design combines excellent color consistency, optical cover, and shielding angle to bring lower glare and a more comfortable lighting experience.
- Safety and reliability. Backed by Philips quality assurance, it offers up to 25,000 hours of good quality and reliable light.
- Flexible and elegant lighting solution. Comes in two classic and stylish designs, with a selection of dimensions that can be installed easily for a variety of applications

Product size

#### All dimensions in millimeters



Туре	D	н
BY118P LED33	254	155
BY118P LED21	226	137
BY118P LED16	226	137



Туре	D	н
BY158P LED33	254	180
BY158P LED21	226	155
BY158P LED16	226	155

### IP20 25Khrs Up to 85 lm/W

Technical parameters	
Model	SmartBright Lowbay – BY118P/ BY158P
Product dimension (diameter×height)	BY118P- 254 x 155 mm/226 x 137 mm/ 226 x 137 mm BY158P- 254 x 180 mm/226 x 155 mm/ 226 x 155 mm
Weight	1.08kg/0.85kg/0.78kg
Operation temperature	-20°C <ta<35°c< td=""></ta<35°c<>
Classification	Class I
Certification	CB/EMC/AZS/CE
Installation	Suspended/Pipe Mounted/ Hook Mounted
Life time	25,000 hours(L70)
System Output	3400lm/2300lm/1700lm
ССТ	CW (6500K)/NW (4000K)/WW (3000K)
CRI	CRI 80
SDCM	SDCM<5
System watt	40W/30W/20W
Input voltage	220-240V ; 50/60 Hz
Control	PSU fixed
PF	>0.9
Material and process	Housing: PC ; Optical cover: PC
IP	IP20
Color	Silver (Standard 12ncs) White/Black (ETO options)

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