

TrueForce/LED HID lamps

# Real pros have powerful substitutes for HID

Discover the high-performance portfolio of Philips LED lamps for HID replacement



# Switch out-of-date HID for out-of-this-world LED

Philips LED HID lamps provide an easy LED solution to replace HPL, HPI, SOX as well as SON-T lamps

Enjoy the benefits of LED like improved energy efficiency and long lifetime, while keeping your initial investment low. With the right lamp size and light distribution, you can easily fit LED HID lamps into your customers' existing systems, thereby enhancing light quality without having to change the light fixtures or altering the luminous effect. Our top-class LED technology guarantees low maintenance and comes with a warranty of up to 8 years.\*

Great light should go anywhere, which is why Philips LED HID lamps feel at home in a number of applications, from industry and retail to urban, street, and road.

And because budgets can be as varied as applications, the portfolio of Philips LED HID lamps offers the families TrueForce/MASTER and the even more cost-effective TrueForce Core/CorePro. Both offer outstanding performance that lasts and performs longer.

## For more information visit: philips.com/trueforce-led-lamps

Finding the right lamps for different plans, needs and budgets is easy with the extensive Philips portfolio. It ensures that you always have a quality solution at the price you want.

PHILIPS

TrueForce / MASTER

#### TrueForce / MASTER

Robust lighting solutions for top performance and energy efficiency

- Up to 4KV surge protection
- IP40/IP60/IP65 product (IP-rated sockets required for outdoor applications)



TrueForce Core CorePro

#### TrueForce Core / CorePro

Trusted, reliable, great value lighting for your everyday lighting jobs

- Up to 2KV surge protection
- IP65 product (IP-rated sockets required for outdoor applications)

Price



#### **Easy adoption**

No need to change the fixture!



#### **Right light distribution**

Enhances comfort and safety in multiple application areas.



#### Fast payback

It usually takes less than two years for LED lamps to pay for themselves.



#### Low investment, long lifetime

The long lifetime of up to 70,000 hours (L70B50) makes LED an attractive investment.



#### Sustainability

Low energy consumption and a longer lifetime make LED lighting the sustainable choice.



#### First-rate LED technology

Our high-quality products require minimal maintenance – yet come with a warranty of up to 8 years for peace of mind.\*

#### Everywhere amazing



#### **Industry and retail**

Replace conventional HPL lamps to improve light quality, safety and productivity.



#### **Outdoor community spaces**

Easily replace existing HPI and SON-T lamps with LED HID lamps for more sustainable, safer and brighter urban locations.



#### Road, street and landscape

Big in performance and low in maintenance: use LED HID lamps to replace conventional SOX, SON-T and CDO lamps.

\* Warranty depends on lifetime of lamp

Find the right Philips LED HID lamp for every application and demand using our handy product finder: philips.com/productfinder

Find our ballast compability list on philips.com/ledtube

#### **TrueForce Core / CorePro**



#### **TrueForce / MASTER**

Value and features:





#### CorePro LED HID HPL



Philips CorePro LED HID HPL lamps offer you an easy, shortpayback LED solution to replace HID lamps in road, street and other public areas.

- Similar look and feel as conventional HID SON/HPL lamps
- IP65 design suitable for indoor and outdoor applications<sup>1</sup>
- Perfect fit in HID luminaires with mains-only connection
- Up to 2KV surge protection

Click here for more details

#### CorePro LED SON-T



Replace conventional SON-T lamps with highly efficient, cost-saving LED in road applications. As a quick payback solution these lamps combine instant savings with a low initial investment.

- New: LED replacement for conventional up to 100-150W SON-T lamps available
- Enables 60% energy savings compared to conventional road lighting<sup>2</sup>
- High-efficiency GaN driver design
- Perfect fit in HID luminaires with mains-only connection
- Up to 2KV surge protection
- IP65 product (IP-rated sockets required for outdoor applications)

Click here for more details

#### MASTER LED HID HPL



Philips MASTER LED HID HPL lamps offer an easy and short payback LED solution to replace HID lamps in urban applications.

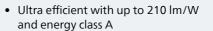
- Similar look and feel as conventional HID
- Long lifetime of 50,000 hrs (L70B50)
- IP65 design suitable for indoor and outdoor applications1
- Perfect fit in HID luminaires with mains-only connection
- Up to 4KV surge protection

Click here for more details

#### **MASTER LED SON-T UltraEfficient**



The first ultra-efficient Philips LED SON-T lamp to easily replace conventional HID.



- Saves 65% in energy costs<sup>3</sup>
- Long lifetime of 50,000 hours (L70B50)
- Direct retrofit solution with little installation effort
- Available with E27 and E40 sockets
- Up to 4kV surge protection
- IP65 product (IP-rated sockets required for outdoor applications)

Click here for more details

#### **MASTER LED HID SON-T**



Your easy and short-payback LED solution to replace HID lamps in urban and road applications.

- Easy retrofit solution, no changing of luminaire's ballast or reflector necessary
- Cost saving with short payback time
- Longer lifetime than conventional HID up to 70,000 hrs (L70B50)
- Two versions: InstantFit; EM/Mains Voltage
- Up to 6KV surge protection
- IP40 product (IP-rated sockets required for outdoor applications)

Click here for more details

#### CorePro highbay HPL



Philips CorePro LED industrial and retail lamps give you an affordable and easy payback solution to replace HID lamps in highbay applications.

- Quick and easy payback solutions to replace HID lamps in low/medium and highbay applications
- Low initial investment and quick payback through energy cost savings
- Additional energy savings by replacing EM gear for mains-only connection

Click here for more details

#### **TrueForce Core LED highbay HPL**



Easily replace HID lamps in warehouses, factories, shops and transport hubs and provide instant savings with low initial investment.

- Enhance lighting quality with easy adoption
- Low initial investment and quick payback through energy cost savings
- Light distribution supports wider working spaces
- Wide beam angle (WB 240°)

Click here for more details

#### **TrueForce LED HID HPL**



Easily retrofit TrueForce LED lamps into existing systems in public urban applications like parks, squares, streets and parking areas.

- Low initial investment and quick payback through energy cost savings
- Up to 4KV surge protection
- Light in weight
- Direct retrofit for EM/Mains connections
- IP65 product (IP-rated sockets required for outdoor applications)

Click here for more details

#### TrueForce LED highbay universal HPI



Bring all the benefits of replacing HID with LED to industrial and retail facilities like warehouses, factories, shops and transport hubs.

- Quick and easy payback solution to replace HID lamps in highbay applications
- Direct retrofit no need to change the fixture
- Two beam angles: narrow beam (NB 60°); wide beam (WB 120°)
- Compatible with both 250W and 400W gears

Click here for more details

#### **TrueForce LED SOX**



The perfect fit LED solution for SOX system retrofit in road, street and tunnel applications.

- Direct retrofit for traditional SOX system with TrueForce LED SOX lamp and integrated LED driver
- Low initial investment and quick payback through energy cost savings
- Perfect fit in HID SOX luminaires with mains-only connection
- Up to 6KV surge protection
- IP60 product (IP-rated sockets required for outdoor applications)

Click here for more details

All calculations are based on the average energy cost of 0.252 €/kWh according to the latest Eurostat report, and it is calculated for the non-household consumers in Europe, valid in H12023, based on 27 countries, all taxes and levies included. The data presented is an illustrative forecast based on a proprietary model developed by Signify to help customers understand the impact of lighting on the environment. Signify's "Green Switch conventional light point conversion model" uses input from numerous sources, references, and data points (available upon request) to generate a simulated view of a given market's energy consumption, but the accuracy of which cannot be verified. The thousand separator is a comma (,) and the decimal separator is a period (.).

<sup>1</sup> Use relevant IP rated sockets for outdoor installations

<sup>&</sup>lt;sup>2</sup>This calculation compares the Philips CorePro LED SON-T 40W with conventional SON-T lamp 100W (including 10W ballast loss).

<sup>&</sup>lt;sup>3</sup> This calculation compares the Philips MASTER LED SON-T UE 42.8W with a conventional SON-T lamp 100W (including 10W ballast loss)

### Real pros tell

### HID to hit the road

Discover the Philips CorePro LED SON-T – the straightforward replacement for conventional SON-T lamps in road lighting

#### **Benefits and features**

- Enables 70% energy savings compared to conventional road lighting<sup>1</sup>
- Low initial investment, short payback time
- Full glass design for familiar look and feel
- Up to 10,000 lm output thanks to mega-filament
- High efficiency thanks to advanced driver design (GaN technology)
- Lifetime of 25,000 hours
- Direct retrofit with mains-only wiring solution for E27/E40
- IP65 for long-lasting outdoor use<sup>2</sup>
- Good color rendering (Ra 70) and color temperatures of 2700K, 3000K and 4000K



New

products to replace 100-

150W SON-T

lamps

#### **Great savings ahead**

Conventional SON-T Philips CorePro LED SON-T















4.380 hrs 0.252 €/kWh

Installation cost/light source ≈10€ Average buying price/lamp 112.58 € Relative total costs/year/lamp 75 56 €

Compared to a conventional SON-T, the annual energy saving from one Philips CorePro LED SON-T can charge 15 electric cars for a whole year!4

This calculation compares the Philips CorePro LED SON-T 49W 740 E40 MV with a conventional SON-T lamp 150W (including 15W ballast loss). The lights are on for an average of 12 hours per day, 365 days of the year (4,380 hours annually). The average energy cost is 0.252 €/kWh according to the latest <u>Eurostat report</u>, and it is calculated for the non-household consumers in Europe, valid in H12023, based on 27 countries, all taxes and levies included. The data presented is an illustrative forecast based on a proprietary model eveloped by Signify to help customers understand the impact of lighting on the environment. Signify's "Green Switch conventional light point conversion model" uses input from numerous sources, references, and data points (available upon request) to generate a simulated view of a given market's energy cor cannot be verified. The thousand separator is a comma (,) and the decimal separator is a period (.). <sup>2</sup> IP-certified luminaires with a suitable IP-certified socket must be used for outdoor installat

3 Calculation based on CO<sub>2</sub> gas emission of 0.28 kg/kWh

<sup>4</sup>This calculation compares the Philips CorePro LED SON-T 49W 740 E40 MV with a conventional SON-T lamp 150W (including 15W ballast loss). The lights are on for an average of 12 hours per day, 365 days of the year (4,380 hours annually). The calculation of the charging energy for electric cars is based on the assumption that 170Wh/km are required for 20,000 km per year. Source: https://ev-database.org/cheatsheet/energy-consumption-electric-car





### **Exceeding expectations with** TrueForce LED HID SON-T

#### **Background**

Stratford-upon-Avon, a medieval market town in England's West Midlands, is the 16th-century birthplace of William Shakespeare. As you might expect from a town steeped in history, Stratford-upon-Avon has a large number of Heritage lanterns. Whilst much of Warwickshire County Council's residential and traffic routes have already been upgraded to LED, the Heritage lanterns had not been.

The main concern in upgrading was maintaining the structural integrity of the lanterns. Whilst replacing the lanterns was considered, the cost was deemed prohibitive.

A small trial of Philips TrueForce LED HID SON-T lamps was installed.

#### The solution

Philips TrueForce LED HID SON-T lamps were selected, as the product offered a like for like replacement into the existing lantern using the existing optic to photometrically replace the SON-T & CDO-TT lamps.

Philips TrueForce LED HID SON-T lamps offer an easy and short payback LED solution to replace High Intensity Discharge (HID) lamps. The products bring the energy-efficiency and long lifetime benefits of LED to HID replacement, while providing instant savings with a low initial investment. With the right lamp size and light distribution, you can easily retrofit TrueForce LED SON-T lamps into the existing systems without changing the luminaire's ballast or reflector while enhancing the lighting quality.

Following trials, Warwickshire County Council took the decision to replace all Heritage and Beta 5 lanterns with Philips TrueForce. The upgrade means that energy usage will be more than halved.

With the improved energy efficiency, the payback period on the installation will be less than two years.

"We were confident using a Philips lamp that we were getting a top product but TrueForce has exceeded our expectations."

Mike Cunningham, Street lighting Manager, Warwickshire County Council





Conventional tubular shape

€	rj	-	

tubular shape			
Wattage	Philips LED HID		
	Core LED Road 17W	М	0
SON-T (A)PIA Plus	Core LED Road 26W	М	×
E27 50W	MAS LED SON-T UE 19W	М	×
	MAS LED SON-T 23W	IF/EM	×
	Core LED Road 26W	М	0
	Core LED Road 40W	М	×
SON-T (A)PIA Plus	MAS LED SON-T UE 19W	М	0
E27 70W	MAS LED SON-T UE 28.5W	М	×
	MAS LED SON-T 34W	IF/EM	×
	MAS LED SON-T 23W	IF/EM	0
	Core LED Road 40W	М	×
	Core LED Road 45W	М	×
CONT (A)DIA DI	MAS LED SON-T UE 28.5W	М	0
SON-T (A)PIA Plus E40 100W	MAS LED SON-T UE 42.8W	М	×
	MAS LED SON-T 50W	IF/EM	×
	MAS LED SON-T 34W	IF/EM	0
	Core LED Road 45W	M	0
SON-T (A)PIA Plus	MAS LED SON-T UE 42.8W	M	0
E40 150W	MAS LED SON-T 65W	IF/EM	×
			×
SON-T	Core LED Road 17W	M	
E27 50W	MAS LED SON-T UE 19W	M	X
	MAS LED SON-T 23W	IF/EM	X
	Core LED Road 26W	M	X
	Core LED Road 40W	M	X
SON-T E27 70W	MAS LED SON-T UE 19W	M	0
E27 70VV	MAS LED SON-T UE 28.5W	М	×
	MAS LED SON-T 34W	IF/EM	×
	MAS LED SON-T 23W	IF/EM	0
	Core LED Road 40W	М	×
	Core LED Road 45W	М	×
SON-T	MAS LED SON-T UE 28.5W	М	0
E40 100W	MAS LED SON-T UE 42.8W	М	×
	MAS LED SON-T 50W	IF/EM	×
	MAS LED SON-T 34W	IF/EM	0
	Core LED Road 45W	М	0
SON-T E40 150W	MAS LED SON-T UE 42.8W	М	0
	MAS LED SON-T 65W	IF/EM	X
	Core LED Road 26W	М	×
CDO-TT E27 50W	MAS LED SON-T UE 28.5W	М	×
	MAS LED SON-T 23W	IF/EM	×
	Core LED Road 26W	М	×
CDO-TT	MAS LED SON-T UE 28.5W	М	X
E27 70W	MAS LED SON-T 34W	IF/EM	X
	MAS LED SON-T 23W	IF/EM	0
	MAS LED SON-T 50W	IF/EM	0
	Core LED Road 40W	М	0
CDO-TT	Core LED Road 45W	М	X
E40 100W	MAS LED SON-T UE 42.8W	М	X
	MAS LED SON-T 65W	IF/EM	×
	Core LED Road 45W	M	0
CDO-TT E40 150W	MAS LED SON-T 65W	IF/EM	0
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Ro	oad 🌡	u U
d, Street	Flood lig Landso	jhting, cape

Conventional tubular shape

Wattage	Philips LED HID		
SOX B22 35W/26W	LED SOX 18W	EM	×
SOX B22 55W/36W	LED SOX 28W	EM	×
SOX B22 55W	LED SOX 36W	EM	×

Road

#### Symbols and abbreviations

#### TrueForce Core LED/CorePro lamps:

Convenient and cost-effective

#### TrueForce LED/MASTER lamps:

Top-quality and robust

#### X True replacement:

Initial perceived light effect/lux levels of LED lamp is the same or better than conventional HID

#### O Average equivalence:

Average perceived light effect / lux levels of LED lamp during the life comparable to conventional HID

#### UN Universal:

Plug & play solution with existing gear, no need to re-wire or remove any components. Can also work with direct mains voltage input to save additional energy.

#### EM EM/Mains:

The solution works both with EM ballast or connected directly to Mains. When being connected directly to mains you achieve even more energy savings. When connected to the existing EM ballast, the ignitor as well as a parallel compensation capacitor should be removed to decrease the power factor.

#### IF InstantFit:

Plug & play solution with existing gear, no need to re-wire or remove any components. Not recommended to remove ignitor and capacitor. Cannot work on Direct

#### M Mains only:

Mandatory to bypass EM ballast, capacitor and ignitor. Can only be used with direct mains voltage input.

Ur	ban	Retail	Industry
Post top, Heritage	Teardrop, Pendant	Highbay / Midbay	Highbay
	darled to		
*			
Philips LED HI	D	Philips LED HID	Philips LED HID

		49.8%	200 16/10			
Conventional oval shape	·					
Wattage Philips LED HID						
UDI 527 50W	Core LED HPL 13W	М	×			
HPL E27 50W	TForce LED HPL 21W	EM	×			
	Core LED HPL 13W	М	0			
HPL-N	Core LED HPL 18W	М	×			
E27 80W	MAS LED HPL 19W	М	×			
	TForce LED HPL 21W	EM	×			
	Core LED HPL 18W	М	0			
	Core LED HPL 26W	М	×			
HPL	MAS LED HPL 19W	М	0			
E27 100W	MAS LED HPL 24W	М	×			
	TForce LED HPL 21W	EM	0			
	TForce LED HPL 28W	EM	×			
	Core LED HPL 26W	М	0			
	Core LED HPL 36W	М	×			
HPL-N	MAS LED HPL 24W	М	0			
E27 125W	MAS LED HPL 33.5W	М	×			
	TForce LED HPL 28W	EM	0			
	TForce LED HPL 42W	EM	×			
	Core LED HPL 36W	М	0			
HPL E27 200W	MAS LED HPL 33.5W	М	0			
	TForce LED HPL 42W	EM	0			
	Core LED HPL 36W	М	0			
HPL E40 250W	MAS LED HPL 33W	М	0			
2.323011	TForce LED HPL 42W	EM	0			
		1	_			

HPL-N	Core LED HPL 18W	М	×
E27 80W	MAS LED HPL 19W	М	×
	TForce LED HPL 21W	EM	×
	Core LED HPL 18W	М	0
	Core LED HPL 26W	М	×
HPL	MAS LED HPL 19W	М	0
E27 100W	MAS LED HPL 24W	М	×
	TForce LED HPL 21W	EM	0
	TForce LED HPL 28W	EM	×
	Core LED HPL 26W	М	0
	Core LED HPL 36W	М	×
HPL-N	MAS LED HPL 24W	М	0
E27 125W	MAS LED HPL 33.5W	М	×
	TForce LED HPL 28W	EM	0
	TForce LED HPL 42W	EM	×
	Core LED HPL 36W	М	0
HPL E27 200W	MAS LED HPL 33.5W	М	0
	TForce LED HPL 42W	EM	0
	Core LED HPL 36W	М	0
HPL E40 250W	MAS LED HPL 33W	М	0
	TForce LED HPL 42W	EM	0
	Core LED HPL 13W	М	0
SON /	Core LED HPL 18W	М	×
SON PIA Plus E27 50W	MAS LED HPL 19W	М	×
	TForce LED HPL 21W	EM	×
	Core LED HPL 18W	М	0
SON /	Core LED HPL 26W	М	×
SON-PIA Plus	MAS LED HPL 19W	М	0
E27 70W	MAS LED HPL 24W	М	×
CDO-TT 50W	TForce LED HPL 21W	EM	0
	TForce LED HPL 28W	EM	×
SON /	Core LED HPL 36W	М	×
SON PIA Plus E40 100W	MAS LED HPL 33.5W	М	×
CDO-TT 70W	TForce LED HPL 42W	EM	×
HPI E40 150W			
	1		

**HPI E40 250W** 

**HPI E40 400W** 

MH E40 250W

MH E40 400W

			_	
100W	MAS LED HPL 24W	М	×	
	TForce LED HPL 21W	EM	0	
	TForce LED HPL 28W	EM	×	
	Core LED HPL 26W	М	0	
	Core LED HPL 36W	М	×	
-N	MAS LED HPL 24W	М	0	
125W	MAS LED HPL 33.5W	М	×	
	TForce LED HPL 28W	EM	0	
	TForce LED HPL 42W	EM	×	
	Core LED HPL 36W	М	0	
200W	MAS LED HPL 33.5W	М	0	
	TForce LED HPL 42W	EM	0	
	Core LED HPL 36W	М	0	
250W	MAS LED HPL 33W	М	0	
	TForce LED HPL 42W	EM	0	
	Core LED HPL 13W	М	0	
/	Core LED HPL 18W	М	×	
PIA Plus 50W	MAS LED HPL 19W	М	×	
	TForce LED HPL 21W	EM	×	
	Core LED HPL 18W	М	0	
/	Core LED HPL 26W	М	×	
PIA Plus	MAS LED HPL 19W	М	0	
70W	MAS LED HPL 24W	М	×	
-TT 50W	TForce LED HPL 21W	EM	0	
	TForce LED HPL 28W	EM	×	
/	Core LED HPL 36W	М	×	
PIA Plus 100W	MAS LED HPL 33.5W	М	×	
-TT 70W	TForce LED HPL 42W	EM	×	
40 150W				

			ро ===		
Core LED HPL 13W	М	×	Core HB 20W	М	×
Core LED HPL 13W	М	0	Core HB 35W	М	×
Core LED HPL 18W	М	×	Core HB 30W	М	×
MAS LED HPL 19W	М	×	Core HB 20W	М	0
C	ore LED	HPL 18	:W	М	0
C	ore LED	HPL 26	W	М	×
N	AS LE	HPL 19	W	М	0
N	/IAS LED	HPL 24	W	М	×
Core LED HPL 26W M O					0
Core LED HPL 36W M					
MAS LED HPL 24W					
M	М	×			
				М	_
Core LED HPL 36W					0
М	М	0			
Core LED HPL 36W	М	0			
MAS LED HPL 33W	M	0			
1417 (3 222 111 2 3344	IVI	U			
WW. O EED TH E 33VV	IVI	O			

CorePro HPI 65W	М	×
CorePro HPI 105W	М	×
LED HPI UN 95W	UN	×
LED HPI UN 140W	UN	×
LED HPI Mains 140W	М	×
CorePro HPI 105W	М	×
LED HPI UN 95W	UN	×
LED HPI UN 140W	UN	×
LED HPI Mains 140W	М	×

Use the conversion tables to choose the right LED lamp!

## Get ready to save energy and costs



#### Roac

	Conventional HID 70W		MASTER LED SON-T IF	MASTER LED SON-T mains	MASTER UE LED SON-T glass	Core LED SON-T glass
Lifetime	20,000 hrs	>	70,000 hrs	70,000 hrs	50,000 hrs	25,000 hrs
Lamp wattage	100W	>	50W	50W	42.8W	40W
Average buying price/ lamp (ex. VAT)	16€	>	155.17 €	136.81 €	136.81 €	52.81 €
Total costs/year/lamp <sup>1</sup>	119.88 €	>	72.16€	60.67 €	56.61 €	52.81 €
Number of lamps				100		
Burning hours/year				4,100 hrs		
Total savings/year			4,773 €	5,922 €	6,327 €	6,793 €
Payback period			3.3 years	2.3 years	2.2 years	0.8 years
Reduced CO <sub>2</sub> emissions over lifetime <sup>2</sup>			93,800 kg	114,100 kg	91,900 kg	48,000 kg
	y.		durable lighting with	SON-T lamps for extra n top performance and rgy savings.	Choose MASTER UE LED SON-T lamps for ultra-high energy efficiency and savings.	Choose Core LED SON-T lamps for reliable road lighting with an attractive payback time



	Conventional HPI 400W		MASTER LED HPI UN highbay	MASTER LED HPI mains highbay		
Lifetime	15,000 hrs	>	50,000 hrs	50.000 hrs		
Lamp wattage	400W	>	140W	140W		
Average buying price/ lamp (ex. VAT)	23€	>	179.02 €	161.12€		
Total costs/year/lamp <sup>1</sup>	407.94 €	>	169.24 €	144.46 €		
Number of lamps			100			
Burning hours/year			3,750 hrs			
Total savings/year			23,870 €	26,348 €		
Payback period			0.7 years	0.6 years		
Reduced CO <sub>2</sub> emissions over lifetime <sup>2</sup>			653,300 kg	685,900 kg		
		1	Choose MASTER LED highbays for extra durable lighting with top performance and great energy savings.			



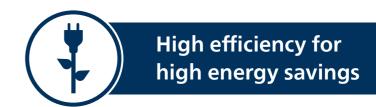
	Conventional HPL 125W	MASTER LED HPL mains	CorePro LED HPL mains		
Lifetime	15,000 hrs	50,000 hrs	25,000 hrs		
Lamp wattage	125W <b>&gt;</b>	33.5W 24.5W			
Average buying price/ lamp (ex. VAT)	15€ >	83.26 €	35 €		
Total costs/year/lamp <sup>1</sup>	117.50 €	30.72 €	23.78 €		
Number of lamps	100				
Burning hours/year	3,000 hrs				
Total savings/year		8,678 €	9,373 €		
Payback period		1 year	0.4 years		
Reduced CO <sub>2</sub> emissions over lifetime <sup>2</sup>		168,900 kg	91,000 kg		
		Choose MASTER LED HPL lamps for extra durable lighting with top performance and great energy savings.	Choose CorePro LED HPL lamps for low-maintenance retail lighting with a low initial investment and an attractive payback time.		



	Conventional HPL 125W	MASTER LED HPL mains – Premium	Master LED HPL mains	CorePro LED HPL mains
Lifetime	15,000 hrs 💙	50,000 hrs	50,000 hrs	25,000 hrs
Lamp wattage	125W <b>&gt;</b>	24W	33.5W	26W
Average buying price/ lamp	15€ >	75€	83 €	35€
Total costs/year/lamp <sup>1</sup>	160.58 €	31.57 €	41.96 €	34.03 €
Number of lamps	100			
Burning hours/year	4,100 hrs			
Total savings/year		12,901 €	11.862 €	12,655 €
Payback period		0.6 years	0.7 years	0.3 years
Reduced CO <sub>2</sub> emissions over lifetime <sup>2</sup>		182,700 kg	168,900 kg	89,900 kg
		Choose MASTER LED HPL lamps for extra durable lighting with top performance and great energy savings.		Choose CorePro LED HPL lamps for reliable lighting wit an attractive payback time.

 $<sup>^{1}</sup>$  Including maintenance and lamp replacement cost.  $^{2}$  Calculation based on CO  $_{2}$  gas emissions of 0,42 kg/kW.

### Philips LED vs. HID



## Replace outdated HID with outstanding LED

Ever wonder what's better when it comes to urban and road applications: HID or LED?

We took a closer look at the main factors you might consider when choosing lighting products. You'll see that with all the advantages of LED lamps, it's hard to find anything that's not to like.

And it gets even better: Switching from HID to LED is easy with Philips LED HID lamps that offer a direct retrofit alternative for many conventional lamp types – without losing the familiar look and feel.

Choose Philips TrueForce/MASTER LED lamps for projects that demand especially high-quality and robust LED lamps – and TrueForce Core/CorePro LED lamps for more cost-effective and convenient solutions.

Real pros switch to LED now!





## Efficiency and robustness

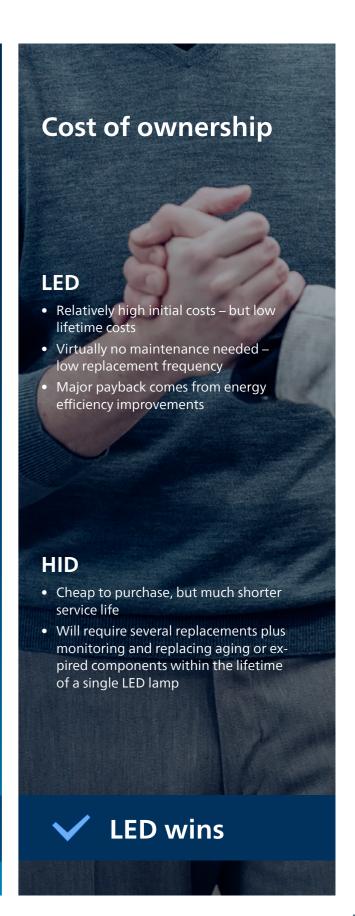
#### **LED**

- Highest system efficacy
- Shock resistant, robust technology with low failure rate
- Up to 8 years warranty\*
- Long lifetime of up to 50,000 hours
- IP ratings for outdoor usage

#### HID

- Lower system efficiency due to losses associated with omnidirectional light output
- Fragile, can fail in a number of ways
- Broken bulbs release a small amount of toxic mercury as a gas
- Approximately half the lifetime of LED





\* Warranty depends on lifetime of lamp

## Real pros choose Philips LED lighting for:

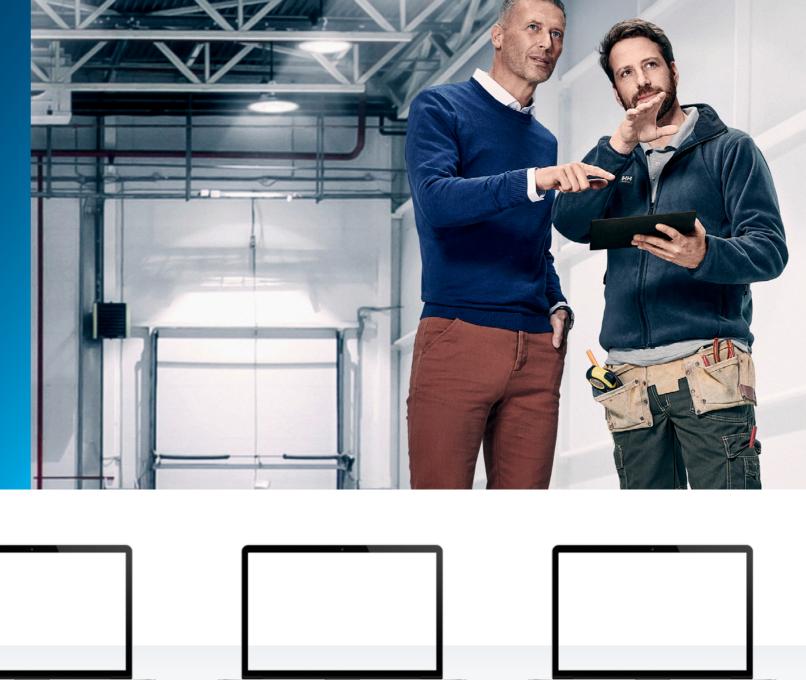
#### The best products

- We're setting new standards for high-quality products that require less maintenance, experience fewer technical hiccups, and strengthen your reputation as a reliable lighting expert.
- Our products are designed with easy installation in mind, saving you time and money.
- From connected lighting to 3D printed luminaires with Philips you get LED lighting that's setting the reference in the industry and that keeps you ahead of the competition.

#### The widest portfolio

Whatever the need, whatever the budget: with our complete portfolio of LED lighting products you'll always have the right solution at hand.

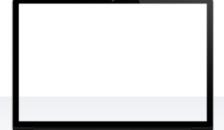




Save time with a partner who understands the challenges you face.

Which is why we offer a comprehensive portfolio of LED **luminaires and lamps** along with handy online tools that make your life easier.





#### Installer hub

- All latest product information
- Installation videos and training
- Links to all tools
- And more!

#### **TCO** calculator

• Calculate the total cost of ownership (TCO) of your product in a few simple steps

#### **Product finder**

• Easily find the perfect LED lamp or luminaire for every budget and application demand

#### **LED** conversion tool

• Use our tool to help clients switch to Philips LED and enable high energy savings

# You and Signifγ – a reliable partnership

Signify, previously known as Philips Lighting, is the world leader in connected LED lighting systems, software and services. We proudly market the best lighting brands in the world, including Philips and Interact.

Close cooperation before, during and after projects is important to us.

Our local service teams make sure you always get the competent support and information you need. We are closely working with local wholesalers to offer you flexible and on-time delivery – and product availability you can rely on.

To help you stay on top of your game the <u>Signify Lighting Academy</u> offers a comprehensive range of educational resources for you to grow your expertise and get certified.

### Our global brands

### **PHILIPS**

The Philips brand stands for quality and energy-efficiency in light. For over 125 years, Philips products have been at the forefront of innovation.

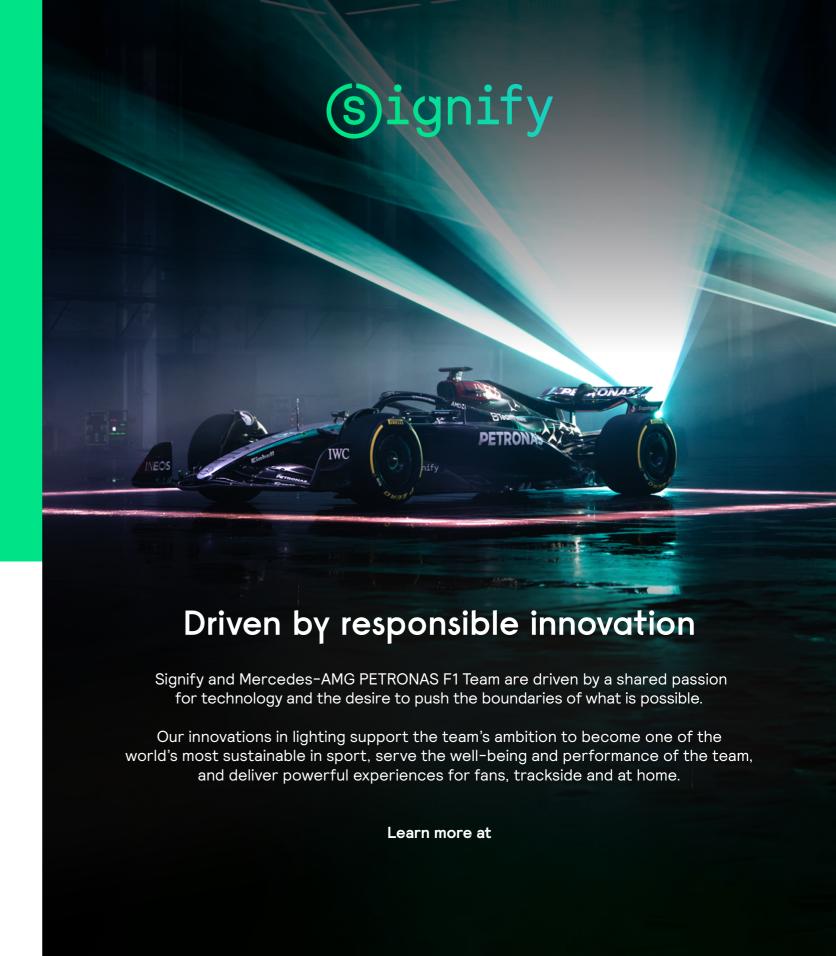
Today Philips is recognized as the leading brand in lighting.

### interact

Interact is the brand of our IoT software and platform that manages smart lighting systems and the data that those systems collect.

Easy to install and set up, Interact software can be used in a wide range of application areas, from small offices to entire cities.

We aim to help you work faster, better, smoother. How? Check:









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