

# You want an easy way to replace HID with LED. **We've got it!**

It's never been easier for real pros to switch to LED. Use this guide to find the right LED replacement for HID lamps.

**LED**  
made  
easy



**REAL PROs**  
**REAL QUALITY**

## Switch out of date HID to out of this world LED

When it comes to unmatched lifetime, energy efficiency, and quality of light output, LED is the lighting to go with. What's more, replacing HID lamps for high performing LED lighting is fast, easy, and hassle-free.

This informative guide is there to help you find the right LED solution for all your needs and applications. With it, you can quickly get started, make the switch and provide your customers with great light that shines and saves longer.

For more information about the range and applications, go to:

[philips.com/trueforce-led-lamps](https://philips.com/trueforce-led-lamps)

## Benefits of switching from HID to LED



### Easy adoption

No need to change the fixture!



### Fast payback

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



### Sustainability

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



### Right light distribution

Enhances comfort and safety in multiple application areas.



### Low investment, long lifetime

The long lifetime of up to 50,000 hours makes LED a clever investment.



### Highest standard LED technology

Low maintenance and up to 5 years warranty pay off!



### TrueForce Core LED (HPL)

- Similar look & feel as conventional HID SON/HPL lamps
- Perfect fit in HID luminaires on existing EM ballast or mains connection
- IP65 design suitable for indoor and outdoor applications

[Go to family page](#)



### TrueForce LED (HPL)

- Direct retrofit – no need to change the fixture
- Low initial investment and quick payback through energy cost savings
- Up to 6KV surge protection
- Light in weight

[Go to family page](#)



### TrueForce Core LED highbay (HPL)

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

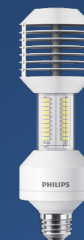
[Go to family page](#)



### TrueForce LED highbay universal (HPI)

- 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

[Go to family page](#)



### TrueForce LED Road (SON)

- Easy retrofit solution, no changing of luminaire's ballast or reflector necessary
- Cost saving with short payback time
- Low initial investment
- Two versions: InstantFit; EM/Mains

[Go to family page](#)



### TrueForce Core LED Road (SON)

- First full glass LED lamp for road lighting
- Enables up to 60% energy saving compared to conventional road lighting and lower initial investment
- High efficiency GaN driver design

[Go to family page](#)



### TrueForce LED (SOX)

- 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

[Go to family page](#)

**LED  
made easy:**  
philips.com/  
trueforce-led-  
lamps



### Urban

Post top, Heritage

Teardrop, Pendant



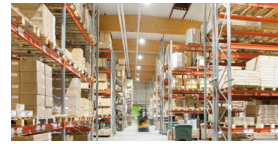
### Retail

Highbay / Midbay



### Industry

Highbay



### Road

Road, Street

Flood lighting,  
Landscape

Road, Street



Conventional  
oval shape



Conventional  
tubular shape



Wattage:	TrueForce		
HPL E27 50W	Core LED HPL 13W	MV	×
HPL E27 80W	Core LED HPL 26W	MV	×
	Core LED HPL 18W	MV	○
	LED HPL 28W	MV	×
HPL E27 125W	LED HPL 21W	MV	○
	Core LED HPL 36W	MV	×
	Core LED HPL 26W	MV	○
HPL E40 125W	LED HPL 42W	MV	×
	LED HPL 28W	MV	○
	Core LED HPL 36W	MV	×
HPL E40 200W	LED HPL 42W	MV	×
	Core LED HPL 36W	MV	○
SON-H E27 50W	LED HPL 42W	MV	○
	Core LED HPL 18W	MV	○
	Core LED HPL 26W	MV	×
	LED HPL 21W	MV	○
SON-H E27 70W	LED HPL 28W	MV	×
	Core LED HPL 26W	MV	○
	Core LED HPL 36W	MV	×
	LED HPL 42W	MV	×
SON-H E40 100W	LED HPL 28W	MV	○
	LED HPL 42W	MV	×
MH E40 250W			
MH E40 400W			


TrueForce		
Core LED HPL 13W	MV	×
Core LED HPL 26W	MV	×
Core LED HPL 18W	MV	○
Core LED HPL 36W	MV	×
Core LED HPL 26W	MV	○
Core LED HPL 36W	MV	×
Core LED HPL 36W	MV	×
LED HPI UN 95W	UN	×
LED HPI UN 140W	UN	×


TrueForce		
Core HB 20W	MV	×
Core HB 30W	MV	×
Core HB 20W	MV	○
Core HB 35W	MV	×
Core HB 30W	MV	○
LED HPI UN 95W	UN	×
LED HPI UN 140W	UN	×

Wattage:	TrueForce			
SON-T PIA E27 50W	Core LED Road 17W	MV	○	
	LED Road 25W	IF/MV	×	
SON-T PIA E27 70W	Core LED Road 26W	MV	○	
	LED Road 35W	IF/MV	○	
SON-T PIA E40 100W	LED Road 25W	IF/MV	○	
	Core LED Road 40W	MV	○	
	LED Road 55W	IF/MV	○	
SON-T PIA E40 150W	LED Road 68W	IF/MV	×	
	LED Road 68W	IF/MV	○	
SON-T E27 70W	Core LED Road 26W	MV	○	
	LED Road 35W	IF/MV	×	
SON-T E40 100W	Core LED Road 40W	MV	○	
	LED Road 55W	IF/MV	×	
SON-T E40 150W	LED Road 68W	IF/MV	○	
CDO E27 50W	Core LED Road 26W	MV	○	
	LED Road 25W	IF/MV	○	
CDO E27 70W	LED Road 35W	IF/MV	○	
CDO E40 100W	LED Road 55W	IF/MV	○	
	LED Road 68W	IF/MV	×	
CDO E40 150W	LED Road 68W	IF/MV	○	
SOX B22 35W / 26W		LED SOX 18W	MV	×
SOX B22 55W / 36W		LED SOX 28W	MV	×
SOX B22 55W		LED SOX 36W	MV	×

× = **True replacement:** initial perceived light effect / lux levels of LED lamp is the same or better than conventional HID

○ = **Average equivalence:** average perceived light effect / lux levels of LED lamp during the life comparable to conventional HID

 **TrueForce Core LED lamps:** convenient and cost-effective

 **TrueForce LED lamps:** top-quality and robust

**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.

**MV = EM/Mains.** Bypass EM ballast for additional energy saving, use direct mains voltage input. Keep EM ballast and need to remove ignitor, recommend to remove parallel compensation capacitor for decent Power Factor.

**IF = InstantFit.** Plug & play solution with existing gear, no need to re-wire or remove any components.