



Upgrade your customers' vision,  
upgrade your business  
OSRAM LEDriving<sup>®</sup> replacement lamps

High and low beam headlights and fog lights, as well as signal and interior lighting.  
Ideal for innovative-oriented drivers.

Light is OSRAM

**OSRAM**



## Be one step ahead

# Meet future demands today – with OSRAM LEDriving® replacement lamps

Do you have customers who want to upgrade their car lighting to the latest state-of-the-art technology? These innovation-oriented drivers attach great importance to their vehicles' safety, performance and style. With OSRAM LEDriving® replacement lamps, you are best equipped to meet all your customers' needs. From easy plug-and-play LED upgrades to elite-performance headlights, signal lamps and interior lighting<sup>1</sup>.



### Perfect for every part of the car

As the global number 1 in automotive lighting, OSRAM is your trusted source of innovative LED replacement lamps. Our comprehensive portfolio of LED retrofits covers a wide range of applications – ranging from high-performance forward lighting to excellent signal and interior lighting.



### Easy upgrade, essential benefits

LEDriving® replacement lamps for forward lighting allow you to upgrade a car's light technology without replacing the light fixture. LEDriving® HL EASY lamps can be installed without any accessories – thanks to their innovative plug-and-play design. With colour temperatures of up to 6,500 K, their cool white light creates a distinctive look that turns vehicles into real eye-catchers<sup>1</sup>.



### Improved visibility

OSRAM LEDriving® HL and FL lamps produce up to 350% more brightness<sup>2</sup>, ensuring optimum visibility and thus allowing drivers to recognize signs, obstacles and hazards sooner than with conventional lamps. OSRAM LEDriving® signal lamps, not only create a stylish modern look, but also improve signalling – thanks to their instant light output.



### OSRAM excellence – quality you can count on

Our LED lighting is based on the highest level of technological know-how. In order to ensure that our research can be carried out in close alignment with the production steps, we have founded an LED competence center in Treviso, Italy, which unites an R&D center and a production line under one roof.

### Good, better, best: an upgrade for every customer

In addition to the wide range of signal and interior lighting products, the OSRAM LEDriving® range now includes three headlight products: EASY, BRIGHT and INTENSE. LEDriving® HL INTENSE lamps represent the pinnacle of high-performance lighting technology with innovative cooling technology to maximise performance (up to 350% more brightness<sup>2</sup>). LEDriving® HL EASY provides an entry level LED solution. Its plug-and-play design does not require any accessories (adapters or caps) for installation. LEDriving® HL BRIGHT has the broadest compatibility (15 conventional high and low beam lamps) and up to 300% more brightness<sup>1,3</sup>.

Bring more light to your customers' lives. Offer LED upgrades with OSRAM products.

<sup>1</sup> These products do not have ECE approval and must not be used on public roads in any exterior application. Public roads use leads to cancellation of operating license and loss of insurance coverage. Several countries forbid sale and use of these products. Please contact your local distributor for further information.

<sup>2</sup> Refers to LEDriving® HL INTENSE lamps compared to minimum ECE R112.

<sup>3</sup> Refers to LEDriving® HL BRIGHT lamps compared to minimum ECE R112, for H7/H18 & H4/H19.

Benefit from our complete portfolio



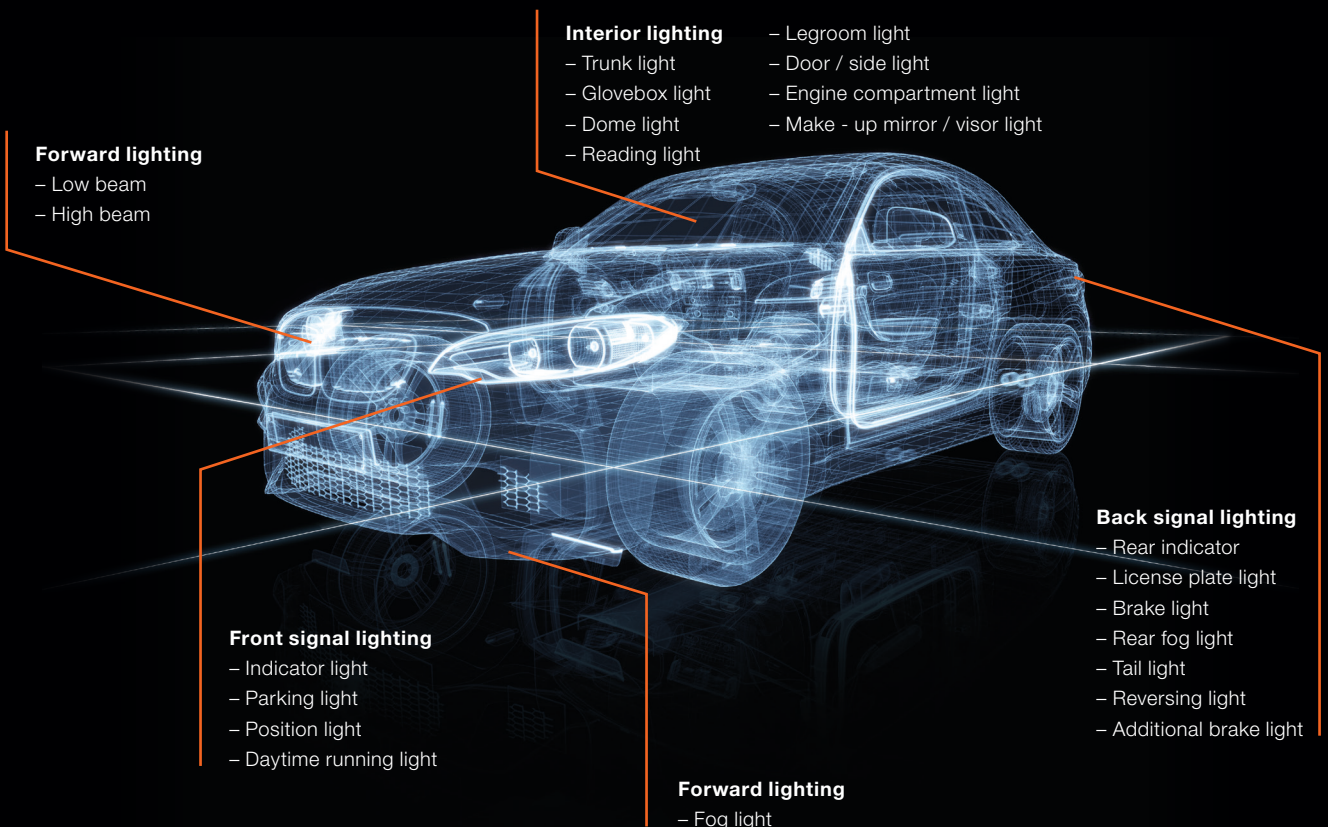
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FORWARD LIGHTING		SIGNAL LIGHTING	INTERIOR LIGHTING
High and low beam headlights	Fog lights	Front signal lighting	Back signal lighting
OSRAM LEDriving® HL EASY OSRAM LEDriving® HL BRIGHT OSRAM LEDriving® HL INTENSE	OSRAM LEDriving® FL	OSRAM LEDriving® SL	OSRAM LEDriving® SL






## Step up to the next level

# With OSRAM LEDriving® forward lighting lamps

Impressive in terms of their performance and design quality – OSRAM LEDriving® HL lamps for high and low beam headlights offer a convenient solution to upgrade your customers' vision. Their superior brightness and cool white light not only increase visibility, but also improve styling with a more dynamic look. These top-quality LED replacement lamps are equipped with the latest technology. And, with three models to choose from – EASY, BRIGHT, INTENSE – the range offers a solution for all your business needs. Whether that's easy installation and affordability, broad compatibility, or high-performance upgrades.<sup>1</sup>



**Homogeneous light:** Compared to conventional halogen lamps (left), OSRAM LEDriving® HL lamps (right) offer an optimized light distribution that reduces glaring.



**See farther, react sooner:** With OSRAM LEDriving® HL lamps (bottom), everything that lies ahead of the car can be recognized earlier.

## See and be seen

### LEDriving® HL EASY<sup>1</sup>

#### Features and benefits

- Compact plug-and-play design ensures easy installation
- Cool white colour temperature of 6,500 K creates day-like effect
- Cooled by a high-speed fan for high performance
- Compatible with a fairly wide range of vehicles (H7, H18, H4, H19 and H15 bulbs)
- Long lifetime<sup>2</sup> (up to 1,000 hrs) ensures customer satisfaction
- Premium quality OSRAM product

### LEDriving® HL BRIGHT<sup>1</sup>

#### Features and benefits

- Superior vision with up to 300% more brightness<sup>3</sup>
- Multi-compatible smart reference ring for broad coverage (15 equivalent halogen bulbs)
- Cool white colour temperature of 6,000 K creates day-like effect
- Quality aluminium body and high-speed fan provide excellent thermal management
- Beam pattern technology ensures optimized light distribution for reduced glare
- Long lifetime<sup>2</sup> (up to 5,000 hrs) ensures customer satisfaction
- Premium quality made product backed by a 4-year guarantee<sup>4</sup>

### LEDriving® HL INTENSE<sup>1</sup>

#### Features and benefits

- Exceptional performance with up to 350% more brightness<sup>5</sup>
- Beam pattern technology ensures optimized light distribution for reduced glare
- Huge portfolio of installation accessories available
- Cool white colour temperature of 6,000 K creates day-like effect
- Long lifetime<sup>2</sup> (up to 5,000 hrs) ensures customer satisfaction
- Premium quality OSRAM product made in Italy<sup>6</sup>
- 5-year guarantee and counterfeit protection thanks to OSRAM Trust Program<sup>4</sup>

<sup>1</sup> These products do not have ECE approval and must not be used on public roads in any exterior application. Public roads use leads to cancellation of operating license and loss of insurance coverage. Several countries forbid sale and use of these products. Please contact your local distributor for further information.

<sup>2</sup> Compared to standard halogen lamps.

<sup>3</sup> Compared to minimum ECE R112 for H7/H18, H4/H19.

<sup>4</sup> Refer to [www.osram.com/am-guarantee](http://www.osram.com/am-guarantee) for precise conditions.

<sup>5</sup> Compared to minimum ECE R112.

<sup>6</sup> Made in a certified OSRAM production plant in Italy.



**Daylight in the night:** With a daylight-like colour temperature of 6,500 K, OSRAM LEDriving® HL and FL lamps (right) provide a higher contrast and thus improve visibility.

Fight fog, rain and snow with brightness:  
OSRAM LEDriving® FL for fog lights<sup>1</sup>

**Features and benefits<sup>1</sup>**

- Cool white colour temperature of 6,000 K
- Ultra-compact LED replacement for conventional H8/H11/H16, H10 and PSX24W fog lamps as socket solution
- Premium quality OSRAM product backed by a 3-year guarantee<sup>3</sup>
- Better visibility in foggy situations with a perfect colour match for xenon and LED headlights
- Reduced glare thanks to optimized light distribution



**Making a difference:** OSRAM LEDriving® FL lamps (right) do not only look cooler than conventional halogen lamps (left). They also provide more light.

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<sup>2</sup> LEDriving® SMART CANBUS and LEDriving® CANBUS CONTROL UNIT avoid error messages on the on-board computer when using LED lamps.

<sup>3</sup> Refer to [www.osram.com/am-guarantee](http://www.osram.com/am-guarantee) for precise conditions.



Find out which car models are compatible with OSRAM LEDriving® HL lamps at [www.osram.com/ledcheck](http://www.osram.com/ledcheck)



## Stand out with style and quality

# With OSRAM LEDriving® SL for signal and interior lighting

LED signal lamps from OSRAM are the jewellery that makes a car shine. The rear lamps contribute to driver safety by providing faster signals and increasing the reaction time of the driver behind. Inside the car, OSRAM LEDriving® SL lamps provide a modern look throughout – from the glovebox to the trunk. Available in cool white, red, and amber, these stylish interior LED lights create an attractive glow that highlights the interior design with an appealing contemporary touch<sup>1</sup>.

OSRAM LEDriving® SL for signal and interior lighting<sup>1</sup>

### Features and benefits<sup>1,2</sup>

- High colour temperatures of up to 6,000 K
- Replaces conventional signal lamps for interior and exterior application
- Long lifetime of up to 2,500 h with low energy consumption
- Multiple light colours for a variety of customisation options
- Simple installation thanks to plug-and-play design
- Premium quality OSRAM product backed by 4-year guarantee<sup>3</sup>



# OSRAM LEDriving® replacement lamps

Exchange overview for forward lighting<sup>1,2</sup>

			Conventional lamps	OSRAM LEDriving® HL		
	V	Application	Product reference	Product reference	K	COLOR
P14.5s (H1)	12		64150 	64150DWBRT 	6000	
P43t/ PU43t-3 (H4/H19)	12		64193 64181L 	64193DWESY 64193DWBRT 64193DWINT 	6000	
PX26d/ PY26d-1 (H7/H18)	12		64210 64180L 	64210DWESY 64210DWBRT 64210DWINT 	6000	
PGJ19-2/ PGJ19-5/ PGJ19-1/ PGJ19-3 (H8/H11/ H16/H9)	12		64212 64211 64219L+ 64213 	64211DWBRT 	6000	
P20d/ PY20d/ PX20d (HB3/H10/ HIR1)	12		9005 9145 9011 	9005DWBRT 	6000	
P22d/PX22d (HB4/HIR2)	12		9006 9012 	9006DWBRT 	6000	
P26.4t (H13)	12		9008 	9008DWBRT 	6000	
PGJ23t-1 (H15)	12		64176 	64176DWESY 	6000	
			Conventional lamps	OSRAM LEDriving® FL		
PGJ19-1 (H8) PGJ19-2 (H11) PGJ19-3 (H16)	12	 	64212 64211 64219 	67219CW 	6000	
PY20d (H10)	12		9145 	9745CW 	6000	
PG20-7 (PSX24W)	12		5202 	2604CW 	6000	

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<sup>2</sup> LEDriving® SMART CANBUS and LEDriving® CANBUS CONTROL UNIT avoid error messages on the on-board computer when using LED lamps.



Exchange overview for forward lighting<sup>1,2</sup>

			Conventional lamps		OSRAM LEDriving® SL		
	V	Application	Product reference		Product reference	K	
PG18.5d-1 (P13W)	12		828		828DWP	6000	
PG20-1 (PS19W)	12		5201		5201DWP	6000	
W2.1x9.5d (W5W)	12	           	2820 2821 2825 2829X 2885X 2886X 2888		2825DWP 2825DRP	6000	
W2.1x9.5d (W5W/ WY5W)	12	     	2827NA		2827DYP	6000	
W2.1x9.5d (W16W)	12	  	921		921DWP 921DRP	6000	
SV8.5-8 31mm, 36mm (C5W), 41mm	12	       	6438 6418 6413		6438DWP 6418DWP 6413DWP	6000	

### Exchange overview for forward lighting<sup>1,2</sup>

			Conventional lamps	OSRAM LEDriving® SL				
	V	Application	Product reference		Product reference		K	
BA15s (P21W)	12	       	7506		7506DWP 7506DRP 7506DYP		6000	
BAU15s (PY21W)	12		7507		7507DYP		6000	
W3x16q (W21/5W)	12	    	7515		7515DWP 7515DRP 7515DYP		6000	
W3x16d (W21W)	12	       	7505		7505DWP 7505DRP 7505DYP		6000	
WX3x16d (WY21W)	12		7504		7504DYP		6000	
BAY15d (P21/5W)	12	        	7528		7528DWP 7528DRP 7528DYP		6000	



Find out more online

Visit [www.osram.com/ledupgrade](http://www.osram.com/ledupgrade) to discover our complete portfolio.






Exchange overview for forward lighting<sup>1,2</sup>

			Conventional lamps	OSRAM LEDriving® SL		
	V	Application	Product reference	Product reference	K	
W2.5x16q (P27/7W)	12		3157	 3157DWP 3157DRP 3157DYP	6000	
BA9s (T4W)	12		3893	 3893DWP	6000	
BA15s (R5W)	12		5007	 5007DWP	6000	
BA15s (R10W)	12		5008	 5008DWP	6000	
W2x4.6d (T5/ W2.3W)	12		2721 2722 2723	 2723DWP	6000	

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










<sup>2</sup> LEDriving® SMART CANBUS and LEDriving® CANBUS CONTROL UNIT avoid error messages on the on-board computer when using LED lamps.

## Colour information

LED colour	Use behind <b>red glass</b>	Use behind <b>clear glass</b>	Use behind <b>amber glass</b>
 <b>Red</b> (tail light, brake light)	Yes	Not recommended	Not recommended
 <b>White</b> (daytime running light, reversing light, license plate light, parking light)	Not recommended	Yes	Not recommended
 <b>Amber</b> (indicator light, side marker light)	Not recommended	Yes	Yes

Choosing the right colour LED lamp can affect the quality and intensity of light output on your vehicle.

## Application information

	Low beam		Dome light
	High beam		Glovebox light
	Daytime running light		Legroom light
	Fog light		Reading light front
	Rear fog light		Reading light behind
	Indicator light		Make-up mirror/visor light
	Tail light		Door/side light
	Reversing light		Trunk light
	Parking/marking light/position light		Engine compartment light
	Brake light/third braking light		
	Additional brake light		
	License plate light		



# Learn more about OSRAM LEDriving® replacement lamps<sup>1</sup> Frequently asked questions (FAQ)

## What are the benefits of LED lamps?

LED lamps offer a multitude of advantages, including their distinctive cool white light, which gives cars a modern look. Thanks to their instant light output, they provide faster signals and thus enable drivers behind you to react faster. In addition, they are characterized by their long lifetime and high energy efficiency compared to conventional lamps.

## How do I replace a conventional lamp with an LED lamp? Is it difficult?

All OSRAM LEDriving® fog and signal lamps – as well as OSRAM LEDriving® HL EASY lamps for high and low beam replacements – are plug-and-play solutions. This makes installing these lamps as easy as it gets. OSRAM LEDriving® HL BRIGHT and INTENSE high and low beam replacement lamps can be easily installed with an adapter and/or caps. However, there are specific vehicle restrictions for them. Please read the respective user manual and check the compatibility overview, which you can find at [www.osram.com/ledcheck](http://www.osram.com/ledcheck)

## The LED lamp does not turn on after installation. How do I fix this problem?

This problem usually only affects lamps from our LEDriving® HL and LEDriving® SL product ranges. Check the lamp's polarity and its contacts for corrosion. If your LED lamp does not turn on, you probably need to:

1. Remove the LED lamp from the housing.
2. Rotate the lamp by 180°.
3. Put it back in the housing.
4. Make sure the LED is on.

For more information, please refer to the user manual.

## What are the LEDriving® SMART CANBUS and CANBUS CONTROL UNIT?

Due to their higher level of energy efficiency, LEDriving® replacement lamps use significantly less power than traditional lamps. This lack of power consumption could be interpreted as a broken lamp by the body control unit. The LEDriving® SMART CANBUS and CANBUS CONTROL UNIT serve as a bypass of a vehicle's lamp failure detection system when using a LEDriving® replacement lamp without compromising on the lamp's performance or lifetime. The control units are easily installed and suitable for most vehicle models with an automatic lamp failure detection system.

## Are LEDriving® replacement lamps compatible for 12 V and 24 V use?

LEDriving® HL replacement lamps are compatible with 12 V vehicles. LEDriving® HL EASY lamps are compatible with cars and motorcycles, however, we also have a dedicated LEDriving® HLM motorcycle portfolio and for 24 V, a dedicated truck portfolio: LEDriving® HLT.

## Are the LEDriving® HL lamps compatible with all headlight systems with conventional lamps?

LEDriving® HL high and low beam lamps do have limitations in terms of compatibility. Please consult our vehicle overview at [www.osram.com/ledcheck](http://www.osram.com/ledcheck) to see if LEDriving® HL are compatible with your vehicle.

## What are possible applications of LEDriving® replacement lamps?

Forward lighting:

- High and low beam headlight
- Fog light

Signal lighting:

- Parking/marketing light/position light
- Indicator light
- Door/side light
- Tail light
- Brake light
- License plate light and more

Interior lighting:

- Dome light
- Reading light
- Dashboard light
- Glovebox light
- Legroom light
- Trunk light and more

Visit [www.osram.com/ledupgrade](http://www.osram.com/ledupgrade) to read our complete FAQ!



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