## Presse Press

Munich, December 5, 2017

# SMARTRIX and laser light from Osram in the new Range Rover and Range Rover Sport

The next generation of Osram SMARTRIX modules, developed in collaboration with Varroc Lighting Systems, gives the popular SUVs a fresh look and improved intelligent lighting.

Following on from the premiere of the innovative SMARTRIX modules in the Jaguar E-Pace, Jaguar Land Rover is now launching the next vehicles with smart headlight technology from Osram. Compared with the Jaguar E-Pace, the Range Rover and Range Rover Sport come with additional modules which make the high beam even more defined and the low beam more dynamic. The matrix or pixel headlights provide optimum visibility and are capable of illuminating specific areas of the road with high beam without dazzling other road users. There is a choice of three versions. The top version is the brightest headlight currently available. The pixel laser LED option with 71 pixels and Laser High Beam Booster, with two first-generation Osram  $\mu$ LARP modules, significantly increases the visual range for the driver. The SMARTRIX modules with their innovative silicone lens system open up entirely new possibilities for headlight designers and give the Range Rover and Range Rover Sport a modern look.

With its SMARTRIX modules Osram is taking a decisive step in the development of automotive lighting technology and making a significant contribution to improving road safety at night. "With Jaguar Land Rover and Varroc Lighting as strong partners, we have succeeded in taking smart lighting to the next level. On the new Range Rover and Range Rover Sport we have increased the number of matrix modules and improved their functionality. The result is a headlight option that right now is unbeatable", said Hans-Joachim Schwabe, CEO Specialty Lighting at Osram. "Coupled with our laser technology,



we have achieved a light output that is five times greater than that of standard LED headlights without dazzling other road users", he added.

## Most powerful smart headlight

The distinctive pixel laser LED headlight with LED signature and smart high beam is the premium option on the new Range Rover and Range Rover Sport. The 71-pixel system provides excellent illumination of the road ahead without dazzling oncoming drivers. At speeds above 50 mph, Osram's laser technology automatically boosts the high beam, illuminating the road up to 600 meters ahead. The µLARP modules each deliver 200 lm and 450 cd/mm<sup>2</sup> and have a particularly high luminance. The light output is five times higher than that of the standard LED headlights, which is especially advantageous for journeys on long country roads.

#### SMARTRIX modules for new angular headlight designs

Apart from making it easier to see and be seen, the SMARTRIX modules give headlight designers greater freedom thanks to the long-life silicone optics that enable the lighting system to be made particularly small and compact. Designers were able, for example, to give the Range Rover Sport modern rectangular headlights in line with the trend toward narrow low-profile units.

## Innovative lighting technology

Jaguar Land Rover's first plug-in hybrid vehicle and the luxury SUV are equipped with premium LED headlights as standard. Customers can choose the matrix LED package as an optional extra. The headlights use 20 pixels to distribute the beam in vertical strips, each of which can be individually controlled. Oncoming vehicles can be masked out in order not to dazzle the drivers. One category higher is the pixel LED headlight which is equipped with a total of 71 pixels, these headlights provide dynamic lighting for the lowbeam and high-beam areas. In addition to the vertical strips, the light beam is also split into horizontal strips so up to four oncoming vehicles can be masked out.





Together with Varroc Lighting Systems, Osram developed various SMARTRIX modules with innovative long-life silicone optics for the new Range Rover and Range Rover Sport headlights.

Picture: Osram



Innovative SMARTRIX modules from Osram provide the basis for the fresh angular design of the headlights on the 2018 Range Rover Sport. Picture: Jaguar Land Rover



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## ABOUT OSRAM

OSRAM, based in Munich, is a leading global high-tech company with a history dating back more than 110 years. Primarily focused on semiconductor-based technologies, our products are used in highly diverse applications ranging from virtual reality to autonomous driving and from smartphones to smart and connected lighting solutions in buildings and cities. OSRAM uses the endless possibilities of light to improve the quality of life for individuals and communities. OSRAM's innovations enable people all over the world not only to see better, but also to communicate, travel, work and live better. OSRAM has approximately 26,400 employees worldwide as of end of fiscal 2017 (September 30) and generated revenue of more than €4.1 billion. The company is listed on the stock exchanges in Frankfurt and Munich (ISIN: DE000LED4000; WKN: LED 400; trading symbol: OSR). Additional information can be found at www.osram.com.



