



### LAND ROVER DISCOVERY SPORT: ELECTRIFIED PERFORMANCE

- **Plug-In:** P300e Plug-In hybrid delivers the performance, refinement and capability customers expect, with an electric-only range of up to 60km<sup>1</sup> and CO<sub>2</sub> emissions as low as 34g/km<sup>1</sup>
- **Cleaner diesels:** Ingenium diesel engines featuring efficiency-boosting mild hybrid technology, available as D165 (120 kW/163PS) or D200 (150 kW/204PS), with CO<sub>2</sub> emissions as low as 166g/km<sup>2</sup>
- **On the charge:** Advanced P300e plug-in hybrid powertrain features enhanced SAVE mode which optimises regenerative battery charging, attaining up to 80 per cent in as little as 90 minutes<sup>6</sup>

The Land Rover Discovery Sport is electrified, with a range of plug-in and mild hybrids to suit every customer's needs. The Ingenium diesel engine range, which was updated in 2020 to meet stringent efficiency requirements, offers two mild-hybrid engines with enhanced performance, improved real-world fuel efficiency and lower CO<sub>2</sub> across the board.

#### EFFICIENT DIESEL ENGINES

Two efficient four-cylinder Ingenium diesel engines are available, both featuring Mild Hybrid Electric Vehicle (MHEV) technology. Using a belt-driven starter motor and battery pack, vehicles fitted with MHEV technology harvest energy normally lost under deceleration, feeding back to a 48-volt battery to boost performance and enhance fuel economy. Available in 120 kW/165PS and 150 kW/204PS outputs, these are more powerful than the outgoing engines, with improved CO<sub>2</sub> and fuel economy.

Producing 163PS (120kW), the economical D165 diesel, available as manual and automatic, remains a flexible engine option for those requiring the strength of a diesel thanks to 380Nm of torque and low fuel consumption. The four-cylinder diesel engine also comes with a 204PS (150kW) D200 automatic option. Both feature lightweight construction and low-friction technologies for superior efficiency, with CO<sub>2</sub> emissions from 166g/km<sup>2</sup> and 175g/km<sup>2</sup> for the D165 and D200 respectively.

The D165 manual delivers a 0-100km/h in 10.4 seconds, while the D200 variant is capable of 0-100km/h in 8.6 seconds.

The engine is 2kg lighter than its predecessor thanks to a weight-saving regime combining new technology and engineering that also results in fuel economy and refinement improvements. The engine gets up to temperature more quickly from cold due to a split-cooling system that features a



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variable flow coolant pump and mapped thermostat. To conserve energy the lubrication system is capable of varying its output depending on the load on the engine and its speed.

Changes to the combustion and boosting systems also contribute to the reduction in weight, while internal friction has been reduced by 17 per cent. A combination of scissor gear balancer shafts, solenoid injectors and the stiff lightweight aluminium block improve refinement for the driver. The scissor gear balancer shafts work to oppose and counter any vibrations and minimise rattles, while the 1,800 bar solenoid fuel injection system has a finer spray pattern to reduce noise. This gives smoother and more consistent combustion.

The P300e Plug-in-Hybrid Discovery Sport, which was introduced in 2020, combines a 147 kW/200PS 1.5-litre three-cylinder engine with a 109PS (80kW) electric motor integrated into the rear axle, powered by a 15kWh lithium-ion battery. The P300e offers an impressive electric-only range of up to 60km<sup>2</sup> and fuel economy from 1.5l/100km<sup>1</sup>.

The engine range comprises:

Diesel:

- D165 – 163PS (120kW), 2.0-litre four-cylinder diesel MHEV, 380Nm of torque at 1,500-2,500rpm
- D200 – 204PS (150kW), 2.0-litre four-cylinder diesel MHEV, 430Nm of torque at 1,750-2,500rpm

Petrol:

- P200 – 200PS (147kW), 2.0-litre four-cylinder petrol MHEV, 320Nm of torque at 1,200-4,000rpm
- P250 – 249PS (184kW), 2.0-litre four-cylinder petrol MHEV, 365Nm of torque at 1,300-4,500rpm
- P300e – 309PS (227kW), 1.5-litre three-cylinder petrol plus electric motor, 540Nm of torque at 2,000-2,500rpm

### **DISCOVERY SPORT URBAN EDITION**

Also available is the Discovery Sport Urban Edition. Based on the R-Dynamic, the special edition features distinctive design elements including Shadow aluminium finishers, non-leather Luxtec Suedecloth seats and a black contrast roof.



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### PLUG-IN HYBRID P300e

Discovery Sport is available with Plug-in Hybrid Electric Vehicle (PHEV) technology, delivering the performance, refinement and capability customers expect together with an electric-only range of up to 60km<sup>1</sup> and CO<sub>2</sub> emissions as low as 34g/km<sup>1</sup>.

Badged P300e, the Discovery Sport plug-in hybrid is based on Land Rover's state-of-the-art Premium Transverse architecture, which was designed to support electrification while maintaining Land Rover's signature off-road capability. The plug-in hybrid P300e model joins the existing 48-volt mild-hybrid, bringing new levels of efficiency to the premium compact SUV sector.

The model offers sustainable performance by combining a 200PS (147kW) 1.5-litre three-cylinder Ingenium petrol engine with a 109PS (80kW) electric motor integrated into the rear axle and powered by a 15kWh lithium-ion battery located below the rear seats. Performance and capability are uncompromised, with acceleration of 0-100km/h in just 6.6 seconds.

The Discovery Sport P300e can travel up to 60km<sup>1</sup> using all-electric power and delivers fuel economy from 1.5l/100km<sup>1</sup>. Thanks to its electrified technology, it produces exceedingly low CO<sub>2</sub> emissions of only 34g/km<sup>1</sup>.

### Discovery Sport P300e

- Total power / torque output: 309PS (227kW) / 540Nm<sup>5</sup>
- Combined WLTP fuel economy: 1.5l/100km<sup>1</sup>
- Combined WLTP CO<sub>2</sub> emissions: 34g/km<sup>1</sup>
- EV-only range: 60km<sup>1</sup>
- Rapid DC charging time: 0-80 per cent in 30 minutes<sup>3</sup>

The PHEV's SAVE mode allows the system to recharge more effectively on the move when battery charge is being saved for a later part of the journey – at a steady 115 km/h, up to 80 per cent of the battery charge can be attained in just 90 minutes<sup>6</sup>.

### Driver-selectable modes

Drivers can select from three driving modes to best suit their needs, whether they're in the city or driving on the highway:

1. **HYBRID mode** (the default driving mode) – automatically combines power from the electric motor and petrol engine. The operating strategy adapts to driving conditions and the



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remaining charge in the battery. Entering a destination in the navigation system enables the Predictive Energy Optimisation (PEO) function to intelligently integrate route and GPS data to maximise efficiency and comfort for the selected journey.

2. **EV (Electric Vehicle) mode** – enables the vehicle to run solely on the electric motor using the energy stored in the battery, for quiet, zero-tailpipe emission journeys.
3. **SAVE mode** – prioritises the combustion engine as its main power source, maintaining battery State of Charge at the chosen level. In SAVE mode, the vehicle uses a combination of regenerative braking and the engine, via the belt-integrated starter generator, to charge the battery. The vehicle can recover up to 80 per cent charge in SAVE mode.

### PLUG-IN HYBRID TECHNOLOGY

The Discovery Sport P300e is based on Land Rover's Premium Transverse Architecture, which was designed from the outset to accommodate plug-in and mild-hybrid technologies. The hardware is cleverly packaged beneath the cabin floor without compromising interior space.

The Electric Rear Axle Drive (ERAD) is powered by a compact 15kWh lithium-ion battery located below the rear seats. The battery is made up of 84 prismatic cells, arranged in seven 50Ah modules of 12, with a 6mm-thick steel undertray that protects the battery without compromising all-terrain capability.

The advanced Electric Rear Axle Drive (ERAD) features a light, compact and efficient synchronous permanent magnet motor. To optimise package space, the driveshafts are concentric with the motor and single-speed transmission, while the inverter is also integrated within the ERAD casing. The ERAD module is neatly integrated within the Integral Link rear suspension system.

At speeds above 135km/h, the electric motor is decoupled to reduce drag and therefore optimise efficiency, and then seamlessly re-engages when the speed falls below this.

The compact high-voltage junction box (HVJB) under the front seats is another engineering innovation. This comprises the AC:DC converter (changes high-voltage current from the hybrid battery to low voltage to support the 12-volt network) and the 7kW on-board charger used to charge the hybrid battery when the vehicle is plugged in.

Packaged next to this is the Belt-integrated Starter Generator (BiSG) Inverter which, through intelligent electrical management, can send recuperation energy to the high-voltage battery for storage to use later or for immediate redeployment to support full all-wheel drive capability.



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A new brake-by-wire system replaces the traditional brake vacuum servo, and seamlessly blends regenerative and friction braking to provide a consistent and precise pedal feel. The system can deliver up to 0.2g of deceleration under regenerative braking, maximising energy efficiency by using the vehicle's kinetic energy to recharge the battery on the overrun.

Intelligently locating the PHEV system throughout the structure improves dynamics, lowering the centre of gravity by six per cent and further optimising front-rear weight distribution.

### PLUG-IN HYBRID CHARGING

The Discovery Sport P300e PHEV model is available with a Mode 2 Home Charging Cable, enabling customers to fully charge the vehicle from a plug socket in 6hrs 42mins – perfect for overnight charging. For faster charging, the standard Mode 3 Charging Cable enables customers to plug in to a 7kW AC domestic wall box or AC public charge points: this enables charging from 0-80 per cent in just 1hr 24mins. The quickest charge times are achieved using the growing public charging network of DC charge points: at 32kW DC, 0-80 per cent takes just 30 minutes<sup>3</sup>. The charge port flap is located on the rear fender – on the opposite side to the fuel filler flap.

Customers can stay connected to their Discovery Sport PHEV via Land Rover's intelligent InControl Remote<sup>4</sup> smartphone app. Whether at home or out and about, the app allows customers to monitor the vehicle's charge status, ready the vehicle for a journey or even set a charging timer to take advantage of off-peak energy tariffs.

Owners can automatically pre-condition the battery and cabin temperature before starting a journey. Using mains power to do this when the vehicle is plugged in rather than drawing energy from the battery when you start driving maximises range and enhances occupant comfort.

### 1.5-LITRE THREE-CYLINDER ENGINE: PHEV

A state-of-the-art 1.5-litre three-cylinder petrol engine is at the heart of the Discovery Sport P300e. It's the latest member of the modular, flexible Ingenium engine family, which now has three-, four- and six-cylinder variants.

The lightweight aluminium engine – 37kg lighter than the four-cylinder – delivers strong performance and refinement with impressive fuel economy.

This small-capacity engine achieves exceptionally low levels of friction, which contributes to its excellent efficiency. The exhaust manifold is integrated into the aluminium cylinder head, contributing



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to the rapid warm-up times and minimising the distance from the exhaust ports to the turbocharger's turbine wheel for improved responsiveness.

The three-cylinder configuration delivers a better flow of exhaust gases, ensuring the turbine wheel delivers boost pressure almost instantaneously. A highly efficient Watercooled Charge Air Cooler means the density of air being drawn into the combustion chambers remains high, further enhancing performance and efficiency across the engine's operating range.

The three-cylinder – like the four-cylinder mild hybrid models – also features a Belt-integrated Starter Generator (BiSG) unit. This delivers regenerative braking, recharging the battery on the overrun, and also enables smoother, quieter and faster stop-start operation than a traditional starter motor.

### **EIGHT-SPEED AUTOMATIC TRANSMISSION**

A smooth eight-speed automatic transmission has been selected to match the power and torque delivery of the three-cylinder engine and work seamlessly with the ERAD. As well as being 5kg lighter than the nine-speed transmission used in the other models, the eight-speed delivers enhanced refinement and shift feel and is an integral part of the hybrid system.

The Land Rover Discovery Sport P300e PHEV is available to order alongside the standard 48-volt Mild Hybrid system at [www.landrover.be](http://www.landrover.be) / [www.landroverluxembourg.lu](http://www.landroverluxembourg.lu).

### **ENDS**

**Please note:** There is currently a global shortage of semi-conductor components. As a leading manufacturer utilising cutting edge technology, Land Rover is currently being affected by the shortage and as a result some features described will only be available in certain markets. We are working closely with affected suppliers to resolve the issues and minimise the impact on customer orders wherever possible.

<sup>1</sup> The figures provided are as a result of official manufacturer's tests in accordance with EU WLTP legislation with a fully charged battery. For comparison purposes only. Real world figures may differ. CO<sub>2</sub>, fuel economy, energy consumption and range figures may vary according to factors such as driving styles, environmental conditions, load, wheel fitment, accessories fitted, actual route and battery condition. Range figures are based upon production vehicle over a standardised route

<sup>2</sup> The figures provided are as a result of official manufacturer's tests in accordance with EU WLTP legislation. For comparison purposes only. Real world figures may differ. CO<sub>2</sub> and fuel economy figures may vary according to factors such as driving styles, environmental conditions, load, wheel fitment and accessories fitted

<sup>3</sup> Charge time possible with 50kW & 100kW DC Rapid charger (actual charge into the vehicle will be limited to 32kW). Actual charge times may vary according to environmental conditions and available charging installation

<sup>4</sup> In car features should be used by drivers only when safe to do so. Drivers must ensure they are in full control of the vehicle at all time. Functionality of InControl App varies depending on region

<sup>5</sup> Peak internal combustion engine and electric power not delivered at same engine speed

<sup>6</sup> Based on the vehicle being driven at 115 km/h, figures may vary depending on driving style and speed