

January 2024

THE ALL-NEW LEXUS LM

- The all-new Lexus LM, a flagship “luxury mover”
- Lexus enters a new market segment for luxurious MPVs
- Designed and engineered to deliver complete passenger relaxation and comfort
- Two versions, with four or seven seats
- Four-seat Takumi model takes Lexus Omotenashi hospitality to an even higher level, with large, airline-style seats that can be made fully horizontal, a 48-inch HD ultra-widescreen monitor, refrigerator, and multi-function smartphone-style controller to adjust the cabin environment
- Lexus’s GA-K passenger car platform the basis for rewarding driving dynamics and a comfortable ride
- 2.5-litre self-charging hybrid electric powertrain delivers power with emissions efficiency

LEXUS PRESENTS THE LUXURY MOVER

The all-new LM is a completely new vehicle type for Lexus in Europe, a “Luxury Mover” that combines the qualities of a flagship limousine with the greater spaciousness of an MPV. Its design and specification elevate the principles of Lexus’s *omotenashi* hospitality with a superior specification and attention to detail focused on comfort, well-being and convenience.

Its introduction reflects the diversification of the Lexus product range to attract new customers and address a wider spectrum of lifestyle and mobility requirements.

A human-centred development programme has produced a vehicle with a dual personality: it can be both a perfectly relaxing living space and a flexible, mobile office for those who need to work while on the move. Two versions are available: a four-seater Takumi model, offering a rear cabin with two large, multi-function seats and boasting the last word in travelling luxury; and a seven-seat version, designed for VIP transport. The latter has two rows of full-size rear seats and an additional centre seating position in the third row.

The interior exemplifies Lexus’s brand vision of “making luxury personal”. Seats are designed for perfect support and comfort; the cabin environment is precisely controlled for temperature, air quality and lighting; and there is easy, intuitive access to multiple connectivity and entertainment options, including bespoke Mark Levinson 3D Surround

Sound reference audio systems and (in the four-seat model) a 48-inch HD ultra-widescreen monitor.

Comfort is the defining quality of the LM. Every aspect of the engineering contributes to achieving a perfectly smooth, quiet and composed ride, to the extent passengers might not even notice the vehicle is in motion. Building on the low centre of gravity and high body rigidity benefits of the GA-K platform, Lexus has developed a new Rear Comfort drive mode, adopted new braking and body control systems and refined suspension performance. Similarly, extensive measures have been taken to counter noise and vibration to achieve cabin quietness that has a reassuring, natural quality.

Where the driving experience is concerned, the driver enjoys a natural dialogue with car and the constant comfort, control and confidence of the Lexus Driving Signature. For the first time, the Lexus Driving Signature also takes into account the quality of the passenger experience.

The LM development story: a new approach to luxury

- Luxury concept based on complete mental and physical relaxation
- Human-focused *omotenashi* hospitality, with simplified access to technology features and functions

To help define what the LM should offer, Lexus conducted research with private jet manufacturers and hyper-affluent customers. Its findings confirmed that customers perceive the highest standard of luxury to be when their surroundings make them feel completely rested, both physically and mentally. This quality is rated even more highly than having access to advanced technologies and functions.

Lexus has applied this learning to its design of a vehicle where occupants feel totally relaxed and untroubled, with “no hassle,” personalised comfort. This aligns perfectly with the Lexus *omotenashi* hospitality principle of making people feel as welcome and cared for as guests in your home. It includes simplifying interaction with on-board technologies – an important consideration for people leading busy lives. For example, a “one button” control is all that is needed to adjust cabin climate, lighting and seating to the user’s personal preference. By “making luxury personal,” Lexus enriches the time spent travelling.

Chief Engineer Takami Yokoo explains: “I wanted to create a space where guests who are super busy or living active lifestyles can get back to being their natural self.”

Exterior design: dignified elegance

- “Next Chapter” Lexus design
- Confident road presence with new signature frontal styling
- Packaging maximises rear cabin space

The new LM is the fourth model in the Lexus “Next Chapter,” following the introduction of the latest NX and RX models and the all-electric RZ 450e. Its design, developed on the theme of “dignified elegance,” gives it a unique and confident road presence with proportions that make for ease of use and manoeuvrability. Overall length is 5,125mm, width 1,890mm and height 1,940mm (with 19in wheels). The generous width, height and 3,000 mm wheelbase are key to maximising space for rear passengers.

The bold frontal treatment presents the new Lexus identity, incorporating a reference to the “Resolute Look” – a signature Lexus styling cue since the early 2000s. The spindle shape has been compressed to create a large lower grille section beneath a slim aperture below the leading edge of the bonnet, linking the headlights. The grille is finished in the car’s body colour, creating a more noticeable and unified appearance.

The LM displays flowing lines and rear seat-forward aesthetic. An open feel is generated by the large glass area and low belt line and easy access is provided by large sliding side doors. At the rear, the full-width L-shaped light bar extends beyond the back door to wrap around the rear quarters beneath the D-pillars, creating a strong graphic that emphasises the car’s width.

The wheels are 19-inch forged alloys and colour choices reflect the LM’s prestige, including three deep-lustre “sonic” finishes.

Life on board: the ultimate *omotenashi* on wheels

- Rear cabin with comfort of a personal living space and the convenience of a mobile office
- Two LM versions, with four or seven seats
- Focus on a natural sense of quietness and exceptional comfort

Stepping inside the LM reveals the essence of its character. The rear passenger compartment is welcoming, spacious and designed to make every journey as comfortable, convenient and stress-free as possible.

The human-centred design has produced a cabin that has the comfort of a personal living space and the convenience and functionality of a mobile office, combined in a single luxury vehicle. The calmness of the interior is witnessed in minimalist design with a unity of colours and textures, creating a clean, uncluttered look.

Two LM versions are offered, with four or seven seats. In the seven-seat model, the middle row of two VIP seats is prioritised in terms of space and accessible functions and an additional third row is provided with flip-up seats in a two-plus-one configuration which can be folded away when more load space is required.

The four-seat Takumi model is the pinnacle of luxury, with just two multi-function rear seats and a wealth of features to make every journey supremely comfortable and enjoyable. These include a partition between the front and rear cabin housing a 48-inch ultra-widescreen monitor and glass panel that can be dimmed for privacy. The bespoke Mark Levinson 3D Surround Sound audio system has a 23-speaker array, while cabin comfort is enhanced by a more sophisticated Lexus Climate Concierge that uses thermal sensors to precisely control and direct heating and ventilation.

Seating

The position and design of the seats are critical to the quality of the on-board experience. Typically, those in an MPV are set high and have a high centre of gravity, so occupants are more likely experience side-to-side movement.

The twin power-adjustable seats in the four-seat model are inspired by those found in first-class airline cabins and are among the most advanced and comfortable ever featured in a Lexus model. They have been developed with detailed analysis of passenger body movement using data based on motion capture and sensory evaluation.

They are designed to counter the head-sway effect so passengers can maintain a stable line of sight, and to reduce uncomfortable low-frequency vibrations. They improve posture, supporting occupants securely from pelvis to chest, and provide better pressure distribution for the lower half of the body. The degree of support is such that you should be able to handwrite documents comfortably while the vehicle is moving. Side wires in the seat structure further help hold the body in place and keep the pelvis upright, so there's less risk of adopting a hunched position.

The fixed, pillow-like head rests are designed to suit different heights and body shapes. They provide support from the top of the back rather than the neck, helping keep the body core stable. Both rear seats can be reclined to fully horizontal, airline bed-style* and have integrated, extending ottoman leg rests.

The seat cushions are made of two different vibration-absorbing materials, creating a soft surface on a firm base. They also have a tilt function which prevents the occupant sliding forward when the vehicle brakes. As well as power adjustment, heating and ventilation the seats have an air pocket lumbar support system with four settings so that the gap between the seatback and passenger's body can be filled, absorbing vibrations. For the first time in a Lexus, the seat heating extends to the leg ottomans and arm rests.

Seven different in-seat massage functions are available to relax the back and thighs, with programmes lasting up to 15 minutes.

Equal attention has been paid to the front seats which are designed for optimum pressure distribution and body support, regardless of the G-forces experienced when cornering. The driver's seat has eight-way power adjustment, the passenger seat four-way control. Both are upholstered in semi-aniline leather with integrated ventilation and heating (with three temperature settings).

*For safety considerations, it is recommended that rear seats should only be fully reclined when the vehicle is parked/stationary.

Quietness

Perfect peace and quiet was a top priority for the new LM and essential to its luxury character. The development team took the original Lexus LS as their inspiration, a limousine that marked a breakthrough in quiet performance at its launch.

The goal was to achieve a particular kind of quietness, one with a natural feel rather than the sometimes oppressive "absolute quiet" experienced in a soundproofed room or recording studio. Lexus likens the quality to walking through a silent wood in the open air – an environment that pleases all the senses. In the LM, passengers can comfortably hold a conversation, enjoy a movie, or focus on work. The external sounds that can be heard have a linear relationship to the speed the vehicle is travelling at, enhancing the natural-feeling environment inside the cabin.

To help meet this goal, all noise-producing parts were analysed and effective measures were implemented to minimise noise at source, prevent noise from entering the cabin (insulation) and reduce noise inside the cabin (absorption). Where the vehicle's structure is concerned, sealing has improved its airtightness and clearances have been reduced, for example between the doors and sheet metal parts. Acoustic glass reduces high-frequency wind noise and is also used in the partition in the four-seat LM, reducing noise transmission between the front and rear cabin sections.

Noise-reducing wheels and tyres are used to cancel tyre noise at source: the 19-inch forged alloys use a new, world-first open resonator, developed in partnership with Yamaha.

In the cabin, Active Noise Control (ANC) transmits reverse-phase sound waves through an audio speaker, reducing the build-up of low frequency noise when the car is moving. At the same time, acoustic frequencies the human senses perceive as natural and calming are maintained. Its operation is precisely governed using a dedicated microphone monitoring the rear cabin in the four-seat model, and the front and rear sections of the seven-seat version.

In the four-seat LM, a non-sound-absorbing five-layer headlining is used, making it easier to hold a conversation, while the construction of the centre partition provides excellent sound insulation performance. Both LM versions benefit from carefully located noise-insulating and absorbing materials in the engine compartment, cowl, dashboard and wheel houses. Rigid suspension towers counter road noise transmission and extensive use has been made of high-damping mastic on the roof reinforcements to reduce vibration across the roof's large surface area.

An MPV's box-like silhouette tends to generate wind noise from airflow turbulence when driving at high speed. To address this, the LM has been precisely shaped in key areas, including the steps from the bonnet to the front pillars, the door mirrors and the body sides. Even the position of the wipers has been precisely calculated to minimise wind noise generation.

Ride comfort

Ultimate ride comfort was a top priority, achieved through careful tuning and co-ordination of diverse elements, including the powertrain, platform, body construction, dynamic performance, noise and vibration countermeasures and cabin design.

Chief Engineer Yokoo explains: "No matter how luxurious the interior design and features of a car are, passengers cannot truly spend their time in comfort without sophisticated underlying driving dynamics. The development team's passion and care went into every detail of the vehicle, from the thoroughly honed chassis and body, supple suspension and aerodynamic design, to the seats that suppress body sway, the high-quality tailored interior and the numerous comfort features."

Audio and entertainment experience

A bespoke Mark Levinson 3D Surround Sound reference audio system has been designed for both versions of the LM. The 23-speaker array in the four-seat model and a 21-speaker

set-up in the seven-seater both provide sound reproduction quality of the highest standard, creating the effect of a home theatre system. The speaker layout minimises any difference in the audio experience between the front and rear of the vehicle. Precise stereophonic sound reproduction is provided with an excellent spread, giving the effect of listening to a live concert. The system uses ClariFi technology which can produce high sound quality from compressed digital music files.

In the four-seat LM Takumi, the lower section of the cabin partition houses a 48-inch ultra-widescreen monitor. The 3840 x 1080-pixel screen operates in high definition and has a 32:9 aspect ratio. It is set at an optimal angle for viewing from the rear seats, tilted 15 degrees from the vertical.

There are three viewing modes: full screen, cinema and separate left and right screens showing different content. Two 9cm speakers are positioned on the top edge of the screen; alternatively independent headsets can be used.

Users can stream content directly from their compatible smartphone (requires Mira Cast) or tablet, or connect to the screen via HDMI ports (located in the rear console box in the four-seat model; on the rear end panel of the centre console in the seven-seater). The system is equally suitable for entertainment, or online business meetings.

The audio system is the first in a Lexus to offer both linked and independent modes so front and rear seat occupants can enjoy the same content or different audio outputs from the front and rear speakers.

In the seven-seat model there is a drop-down 14-inch rear display which deploys from the ceiling console. This can be operated in linked mode, so front and rear passengers can view the images; or independent mode, to view different content.

Climate Concierge

Lexus has developed its Climate Concierge system for the new LM, extending its features and functionality beyond air conditioning to cover more aspects of the cabin environment.

The breadth of service it provides can be compared to a personal “butler” ensuring everything meets the user’s requirements.

Personal preferences for the air conditioning, the rear cabin lighting, the window shades and the seat recline position can be selected with one-touch control, with operation tailored for each individual occupant.

The four-seat LM has thermal sensors integrated in the centre partition. These use infra-red surface temperature scanning of the occupants and the cabin to gain a more precise understanding of what level of warmth or cooling is required, and where. Local heating and ventilation sources are adjusted accordingly, including new neck heaters integrated in the rear-seat head rests. Vents in the centre partition have motorised registers that will direct air flow specifically to warm cold hands or feet.

Using nanoe™-X technology helps the Climate Concierge to maintain clean and healthy air quality in the cabin. This adds microscopic water particles to the air flow which can inhibit viruses, bacteria and allergens, while also having a moisturising effect on human skin and hair.

The system’s precision extends to enabling different temperature controls to be set for different parts of the body – the head, chest, thighs and feet. For ease of use, there are five selectable Climate Concierge modes that adjust seat position, sunshades, seat heating and ventilation, air conditioning and cabin lighting (direct and indirect):

- Relax, warm air conditioning and calming illumination (default setting)
- Dream, warm air conditioning and subdued brightness
- Focus, cool air conditioning and refreshing illumination
- Energise, thermal stimulation from the seat and revitalising illumination
- My Original, the user’s personalised settings

Personalised luxury and comfort

With the new LM, Lexus is delivering “ultimate *omotenashi*,” with personalised luxury, comfort and well-being in every detail.

The centre partition in the four-seat model has a die-cast magnesium frame which ensures strength and rigidity. Its clear glass upper section gives rear seat passengers a direct view of

the road ahead. This can be opened or closed, and, when privacy is desired, it can be dimmed at the touch of a button.

Power-operated sunshades are fitted to the twin glass roofs, side windows and rear quarter glass. These can be opened or closed individually or all at once; those on the side windows operate from top to bottom, so they can be part-closed to shield from sunlight while keeping an outside view.

The cabin is illuminated by indirect, ambient lighting in the ceiling and side trim, with further ceiling-mounted spotlights and, in the four-seat model, shadow lighting at floor level. The interior can be enhanced with a wide range of different ambient lighting colour settings, including 14 shades curated in five different mood themes: Healing, Relaxing, Arousing, Focusing and Exhilarating.

In the four-seat LM Takumi, a “hidden tech” approach has been applied, integrating a number of convenience features almost seamlessly into the design. These include adjustable tables that fold out from the seat arm rests and can be rotated out of the way if the passenger wants to reach for a bag or glove box. The table tops are made of high-strength magnesium and trimmed with leather to give an anti-slip surface.

Personal charging stations with a wireless device charger and USB ports are housed in concealed storage points in the sidewall. There are also, reading lights, illuminated cupholders, and vanity mirrors and seat-shaped controls for power adjustment. The centre partition has individual left and right gloveboxes, either side of a refrigerator that has room enough for two standard Champagne bottles or three 500ml plastic bottles. There is also a handy umbrella holder next to the sliding doors.

The assist handles next to each rear door have been designed by *takumi* craftspeople for ideal dimensions and grip profile.

Smartphone-style multi-operation panel

Quick and intuitive adjustment of multiple cabin features and functions is provided by a controller, designed like a smartphone. This can be used to manage the audio system, climate control settings, seat functions, interior lighting and the window blinds in the four-seat model. A warning buzzer sounds if a controller is removed from the immediate vicinity of the vehicle.

The new LM is also the world’s first model to provide a voice recognition function that responds specifically to commands from rear seat passengers. Microphones in the second row of seats are positioned to recognise if it is the left or right side passenger speaking. With

this accurate identification, air conditioning, seat position and lighting can be adjusted specific to the passenger's location.

Overhead console

The rear cabin has a sleek overhead console that incorporates controls for the Climate Concierge, rear side doors and window shades, ambient lighting, vanity mirrors, storage for small items and temperature sensors. Its central position between the twin skylights avoids compromising rear seat headroom.

Wellbeing: providing a clear outward view

A closed-in feel when travelling can make passengers feel uncomfortable and provoke car sickness, particularly when viewing a screen or reading. To address this, Lexus has made the LM's windows as large as possible, so that everyone on board always has a perception of the direction of travel and the vehicle's orientation. The large side windows can be opened and there are twin fixed windows in the roof above the rear passenger compartment; rear passengers also have a clear view ahead through windscreen. In the four-seat model, the centre partition is designed so that the forward view can be maintained when watching the widescreen monitor, even when the window section is closed for privacy or sound isolation.

Seven-seat LM

The cabin of the seven-seat LM has the same horizontal/vertical design theme as the four-seat model, creating a wide-open feel with plenty of natural light through the large windows.

The emphasis is on the middle row seats, which provide "business class" style and comfort with large, adjustable head rests, integrated heating and ventilation and a massage function. USB charging ports are located on the lower section of each seat and HDMI ports and a power outlet are in easy reach on the rear of the centre console. Assist grips and storage pockets are provided on the front seatbacks and individual folding tables are housed in the centre arm rest.

The third row seats have thick cushioning and a tip-up function so luggage space can be increased when required. Additional USB charging points are provided in the rear quarter panels.

The specification includes a 21-speaker Mark Levinson Reference 3D Surround Sound audio system, and a 14-inch multimedia screen that deploys from the roof console (further details on both features above).

Interior colours and trims

The range of interior colours and trim finishes reflect the LM's status and Lexus's craftsmanship. The focus colour for the four-seat model is (optional) Ammonite Sand in high-quality semi-aniline and synthetic leather with contrasting piping using copper-coloured metallic thread in a clear resin coating and matching copper metallic-effect trim. Graduated perforations in the door trim reveal a sub-layer of metallic fabric. The luxurious ambience is enhanced by an Ultrasuede finish for the headlining. A black upholstery option is also available.

A modern, formal look is presented in the seven-seat LM with a combination of semi-aniline leather, with suede inserts in the second row seats.

Lexus has introduced a new woodgrain trim in a traditional Japanese Yebane herringbone pattern, created using a new 3D multi-layer printing technique. The trim is featured on the ceiling console and the instrument panel. The steering wheel ornamentation uses open pore walnut, layered with Bengala red pigment – the iron oxide colouring that's traditionally used in Japanese ceramics and rendering for buildings.

Load compartment

The LM provides generous load space with room in the four-seat model for two 77cm suitcases. In the seven-seat version, four 77cm suitcases can be carried, or five when the third row seats are tipped up. Maximum load capacities are 752 litres for the four-seat LM and 1,190 litres for the seven-seat (VDA measurement).

Driver's cockpit with Tazuna concept design

- Driver's cockpit applies Tazuna concept design principles for easy, intuitive use of controls and information sources
- Precise design and positioning of steering wheel, pedals and driver's seat help make the driver feel at one with their vehicle
- 14-inch multimedia display

True to the principles of Omotenashi, the driver's cockpit is designed with same attention to detail as other new Lexus models. Thus, the arrangement of the principal controls, meters and information sources follows the Tazuna concept, so the driver needs only to make small hand or eye movements and can keep their attention focused on the road ahead. "Tazuna" is the Japanese word which describes the same sort of intuitive control a rider has of their horse, through gentle adjustment of the reins.

The cockpit layout contributes to the Lexus Driving Signature, helping the driver enjoy a constant sense of control and connection with the vehicle and comfort on any journey. To help make the driver feel at one with the car, the steering wheel is set closer at a more upright angle, and the position of the pedals and foot rest has been precisely calculated.

The driver's seat cushion uses materials selected to provide body stability and pressure distribution. Both front seats are power-adjustable – eight-way for the driver and four-way for the passenger.

The front cabin has a broad, open feel with a simple instrument panel design that connects seamlessly with upper door trims. Features include a 14-inch central multimedia touchscreen (with physical dial controls for air conditioning and audio operation) and a centre console with designed-in flexibility to suit the needs of professional drivers.

Multiple connectivity options are provided: the front console box has two USB-C ports and (in the seven-seat model) a Qi wireless charger; the centre console box provides a further USB-C charging port, an HDMI port and a 12V power outlet. Throughout the vehicle, ports are discreetly illuminated and cables can be inserted either way up. Wireless smartphone integration is available for Apple CarPlay; Android Auto can be used with a wired connection.

Throughout, the space exudes the same craftsmanship, quality and attention to detail that's found in the rear passenger section.

The driver can take advantage of advanced features that help keep them fully informed, including a digital rear-view mirror which presents a real-time, unobstructed rearward view and a 10-inch head-up display. A Panoramic View Monitor provides a 360-degree view of

the vehicle's immediate surroundings, or a bird's eye view, to help with precise manoeuvring in tight spaces.

Refined and efficient electrified powertrain

- LM powered by self-charging 247bhp 2.5-litre hybrid electric system
- Offered with front-wheel drive or E-Four all-wheel drive
- First model to feature new Rear Comfort drive mode

Hybrid electric powertrain

The LM 350h uses Lexus's 2.5-litre self-charging hybrid electric powertrain. The system, also featured in the all-new NX 350h and RX 350h models, is well-proven for delivering quiet, refined performance with high efficiency. Maximum power from the total hybrid electric system is 247bhp/250 DIN hp/184kW with peak torque of 239Nm. The powertrain's high efficiency produces CO₂ emissions from 152g/km in the official WLTP combined cycle (LM 350h with FWD). Acceleration from rest to 62mph can be accomplished in 8.7 seconds (9.1 seconds for the FWD model); maximum speed for both models is 118mph.

The vehicle can be specified with front or all-wheel drive. The E-Four all-wheel drive system benefits from increased rear drive torque distribution to give a stable turning posture and contribute to passenger comfort. The torque balance is automatically adjusted between 100:0 to 20:80, giving secure handling when pulling away or cornering on loose or slippery surfaces.

Rear Comfort drive mode

Lexus's first Rear Comfort drive mode adjusts suspension performance and drive torque distribution and suppresses vibration, helping both the vehicle and its passengers maintain a comfortable posture. Squat is reduced by 10 per cent and dive by 45 per cent under acceleration and braking.

The Drive Mode Select system also provides Normal, Eco, Sport and Custom options, accessed by on-screen buttons on the multimedia display, or touch-sensor switches on the steering wheel. The Eco mode adjusts engine/transmission and air conditioning performance to enhance the vehicle's overall efficiency; in Sport mode, engine/transmission, steering and suspension are tuned for sharper response; and in Custom mode, the driver can select their

preferred settings. In all modes, the vehicle's performance under braking is designed to reduce occupants' head movement.

Dynamic performance: delivering the Lexus Driving Signature

- Lexus's GA-K passenger car platform the basis for rewarding driving dynamics and a comfortable ride
- Lexus Driving Signature qualities extend beyond driver rewards to the passenger experience
- Stable and responsive handling supported by a low centre of gravity, high body rigidity, Adaptive Variable Suspension and new braking technologies

Lexus sought to harmonise driving pleasure and ride comfort in the LM, qualities that can be difficult to balance. A key factor in achieving the right results is its use of the GA-K passenger car platform – a choice superior to the van platforms typically used for this kind of vehicle by other manufacturers. This high-quality underpinning ensures high body rigidity, while the vehicle further benefits from drive, braking and suspension technologies that provide good dynamics while preserving ride comfort. The LM will most frequently be a chauffeur-driven vehicle, but it is designed to have an authentic Lexus drive and feel. The driver enjoys a natural dialogue with their car, true to the qualities of the Lexus Driving Signature – comfort, control and confidence at all times. For the first time, the experience of rear passengers has also been taken into account when evaluating delivery of the Lexus Driving Signature.

Meeting the dynamic challenge

By design, MPVs are tall and have a high centre of gravity, which makes ride quality more susceptible to the effects of crosswinds and road surface quality. Large doors and windows also have an impact on inertia performance and steering feel.

To mitigate this, Lexus has made comprehensive improvements to the LM's fundamental elements. These include adopting the GA-K global architecture platform, gaining the benefits of a lower centre of gravity and higher rigidity. The new body's stiffness has been increased with laser screw welding, structural adhesives, bracing and reinforcements in key areas. Using adhesive with high damping performance to reinforce joint rigidity has reduced high-frequency vibrations, which makes a significant contribution to handling stability, ride comfort and overall noise and vibration levels.

Weight has been reduced by using aluminium and thin-sheet steel for external panels, particularly those furthest from the car's centre of gravity, which helps reduce body roll. Savings of 12.3kg have been achieved in the steel panels and 18.5kg in the aluminium doors.

These measures contribute to predictable, composed performance with yaw, pitch and roll minimised. Lexus undertook extensive CAD/CAE testing to measure ride quality, vibration, component limitations and acoustic signatures. Quality was further honed through extensive track testing at Lexus's Shimoyama headquarters.

Suspension

The suspension – front MacPherson struts and rear double wishbones with trailing arms – has been engineered for superior absorption and deflection of road inputs, giving a controlled driving experience and maintaining passenger comfort. Compact design also avoids compromising the vehicle's interior space.

As with the body, the suspension components have been scrutinised for weight-saving opportunities, for example with aluminium being used for the carrier. A new hub bolt fastening system has been adopted, which increases the tyre's contact surface with the road, improving steering response.

The Adaptive Variable Suspension (AVS), fitted as standard, uses Frequency Sensitive Valves in the dampers – a world first for Lexus. This modifies damper performance at micro-amplitude and high-frequency levels, reducing the influx from the road surface. The AVS also features linear solenoid actuators, enhancing performance for a comfortable ride and better steering response.

Braking system

The LM is fitted with Lexus' AHB-G electronically controlled braking, a pressure-on-demand system that uses a high-performance pump for easy usability and a reassuringly natural brake feel with good controllability and response. Independent regulation of front and rear pressure ensures stability under braking.

Ventilated discs are fitted front (328mm diameter) and rear (317mm).

Braking Posture Control controls vehicle roll and pitch under braking by varying the front-rear distribution of braking force. Pitch control operates in line with the driver's use of the brake pedal and vertical inputs from the road to the suspension; when Rear Comfort Mode is engaged, this control is provided more actively. Roll Control suppresses unsteadiness during

cornering to help maintain a stable vehicle posture, for example when driving on a winding road or making a turn at junction.

The braking system also provides Smooth Stop Control, reducing the “rocking back” of the vehicle when it comes to a halt. Braking force is adjusted to move the car’s pitch rotation centre rearwards, to above the rear axle, suppressing body lift.

Active safety and driver assistance

- Latest generation Lexus Safety System+ provided as standard
- Extended Safety Package available, adding Lane Change Assistance and Front Cross Traffic Alert
- Safe Exit Assist operates on both front and rear doors

The LM is equipped with the latest generation of Lexus Safety System+ active safety and driver assistance systems, as also featured in the new NX, RX, LBX and RZ models. These can detect an even wider range of accident risks and provide alerts and steering, braking and drive force support when required, to help avoid or mitigate an impact. They are tuned to operate in a way that feels natural and reassuring to the driver. Their operating scope also reduces the burden of driving, helping reduce fatigue and maintain driver alertness.

The latest portfolio includes expanded functions for the Pre-Collision System (now featuring Emergency Steering Assist) and the Adaptive Cruise Control, together with Proactive Driving Assist for safer driving in slower, urban traffic. A Driver Monitor keeps a constant check on the driver’s alertness and will bring the car gently to a halt, activate the hazard lights and eCall system to summon help if there is no response to warning alerts. The doors – including the sliding rear doors - are fitted with Lexus’s smooth e-latch electronic opening system, with Safe Exit Assist to warn of approaching traffic from the rear and prevent inadvertent opening that might cause an accident.

With the benefit of over-the-air technology, software upgrades can be seamlessly delivered, ensuring owners enjoy the benefits of the latest developments without having to take their vehicle to a service centre.

Customers can also equip their LM with an optional extended safety package. This includes Lane Change Assistance (LCA) which provides automatic lane change steering (when the turn indicators are used in highway/motorway driving). There is also the benefit of Front Cross-Traffic Alert which uses radar monitoring to detect and warn the driver of traffic approaching from either side when emerging from a junction at low speed.

UK model range

- Three-model range – LM 350h with front or all-wheel drive and LM 350h Takumi with all-wheel drive

The all-new Lexus LM range comprises three versions: the standard LM with front or all-wheel drive and the LM Takumi model with all-wheel drive.

LM 350h: equipment highlights

The equipment specification for the seven-seat LM 350h reflects the model's luxury flagship status. Key features include 19-inch alloy wheels, power-adjustable front and middle row seats with semi-aniline leather upholstery with Ultrasuede inserts, twin fixed sunroofs, dual-zone climate control with nanoe-X air quality system and power sunshades. The infotainment package includes the Lexus Link Pro multimedia system, 21-speaker Mark Levinson 3D Surround Sound audio and a 14-inch monitor for the rear passengers that deploys from the ceiling. For the driver there is a heated, power-adjustable steering wheel with wood inserts Panoramic View Monitor, Intelligent Park Assist with remote parking function via the Lexus Link app and head-up display.

LM 350h Takumi: equipment highlights

The Takumi version of the LM delivers an even higher level of on-board luxury, with just two multi-function rear seats and a wealth of features to make every journey supremely comfortable and enjoyable.

The power-adjustable seats can be fully reclined to horizontal and offer seven different massage programmes. Individual folding tables are housed in the outer arm rests and charging stations with USB ports and wireless charging tray are discreetly housed in cabin's side panels.

A partition between the front and rear cabin houses a 48-inch widescreen monitor and a glass panel that can be dimmed for privacy. The monitor has three viewing modes: full screen, cinema and separate left and right screens showing independent content (with individual left/right headsets). Users can project content directly from their smartphone or tablet, or connect to the screen via two HDMI ports. Beneath the monitor there are individual left and right side glove boxes and a refrigerator box.

The bespoke Mark Levinson 3D Surround Sound audio system has a 23-speaker array, while cabin comfort is enhanced by a more sophisticated Lexus Climate Concierge that uses thermal sensors to precisely control and direct heating and ventilation.

Quick and intuitive adjustment of multiple cabin features and functions is provided by a controller, designed like a smartphone. This can be used to manage the audio system, climate control settings, seat functions, interior lighting and the window blinds.

Up to 10 years' warranty cover

In common with every new Lexus, the LM is eligible for Lexus warranty protection for up to 10 years or 100,000 miles (whichever comes first). This comprises an initial three-year manufacturer warranty, followed by up to a further seven years of service-activated warranty.

For the first three years of the car's life, owners can have it serviced at a place of their choice. When the new car warranty period expires, they can then benefit from an additional 12 months (or 10,000 miles) warranty when their vehicle has a qualifying service at an authorised Lexus workshop. The warranty is provided at no extra cost, up to a limit of 10 years/100,000 miles. Terms and conditions apply; full details are available at

www.lexus.co.uk.

LEXUS LM TECHNICAL SPECIFICATIONS

ENGINE	LM 350h FWD	LM 350h AWD
Engine type	4 cylinders in-line	
Valve mechanism	16 valve DOHC	
Displacement (cc)	2,487	
Bore x stroke (mm)	87.5 x 103.4	
Compression ratio	14.0:1	
Total system output – motors and engine (bhp/DIN hp/kW)	247/250/184	
Max. engine power (bhp/DIN hp/kW @ rpm)	187/190/140 @ 6,000	
Max. engine torque (Nm @ rpm)	239 @ 4,300-4,500	
HYBRID SYSTEM	LM 350h FWD	LM 350h AWD
Electric motor (front)		
Type	Permanent magnet, synchronous motor	
Voltage	650	
Max. power (bhp/DIN hp/kW)	178/180/134	
Max. torque (Nm)	270	
Electric motor (rear)		
Type	-	Permanent magnet, synchronous motor
Voltage	-	650
Max. power (bhp/DIN hp/kW)	-	53/54/40
Max. torque (Nm)	-	121
Hybrid battery		
Type	Lithium-ion	
Nominal voltage	259	
Number of modules	9	
PERFORMANCE	LM 350h FWD	LM 350h AWD
0-62mph (sec)	9.1	8.7

Max. speed (mph)	118	
Max. EV speed	77	
DIMENSIONS	LM 350h FWD	LM 350h AWD
Overall length (mm)	5,125	
Overall width – mirrors folded (mm)	1,890	
Overall height (mm)	1,930 – 17in wheels 1,940 – 19in wheels	
Wheelbase (mm)	3,000	
Track front (mm)	1,615	
Track rear (mm)	1,620	
Overhang front (mm)	1,005	
Overhang rear (mm)	1,125	
Coefficient of Drag (Cd)	0.33	
INTERIOR DIMENSIONS	LM 350h FWD	LM 350h AWD
Interior length (mm)	2,735 (4-seat) 2,965 (7-seat)	
Interior width (mm)	1,590 (4-seat) 1,655 (7-seat)	
Interior height (mm)	1,365	
Load space (VDA I)	Rear seats up	752 (4-seat) 110 (7-seat)
	Max. capacity	752 (4-seat) 1,191 (7-seat)
WEIGHTS	LM 350h FWD	LM 350h AWD
Kerb weight (kg)	2,295-2,305	2,345-2,355
Gross vehicle weight (kg)	2,830 (7-seat)	2,870 (4-seat) 2,880 (7-seat)
TRANSMISSION	LM 350h FWD	LM 350h AWD
Type	E-CVT	
Differential gear ratio – front	3.638	3.638

Differential gear ratio – rear	-	10.781
FUEL CONSUMPTION (WLTP)	LM 350h FWD	LM 350h AWD
Combined WLTP (mpg)	42.1	39.2
Fuel tank capacity (l)	60	
EMISSIONS (WLTP), INSURANCE, SERVICING & WARRANTY	LM 350h FWD	LM 350h AWD
CO ₂ emissions – combined (g/km)	152	163
Insurance groups	TBC	
Service intervals	10,000 miles/annually	
Comprehensive warranty	3 years/60,000 miles	
Hybrid warranty	5 years/60,000 miles	
Corrosion & perforation	12 years/unlimited mileage	
Surface rust & paintwork	3 years/unlimited mileage	
SUSPENSION	LM 350h FWD	LM 350h AWD
Front	MacPherson strut	
Rear	Double wishbone	
BRAKES	LM 350h FWD	LM 350h AWD
Front (diameter x thickness, mm)	Ventilated discs, 328 x 34	
Rear (diameter x thickness, mm)	Ventilated discs, 317 x 18	
Parking brake	Electronic	
STEERING	LM 350h FWD	LM 350h AWD
Type	Rack and pinion, electric power steering	
Turns (lock to lock)	2.83	
Min. turning radius (m)	Tyre	5.9
	Body	6.5
WHEELS & TYRES		
Wheel and tyre size	19in cast alloy 225/55R19	

LEXUS LM EQUIPMENT SPECIFICATIONS

SAFETY & DRIVER ASSISTANCE	LM	LM TAKUMI
3 rd generation Lexus Safety System+ with Pre-Collision System, Driver Monitor, Dynamic Radar Cruise Control, Lane Keep Assist, Lane Trace Assist, Lane Change Assist, Front Cross Traffic Alert, Road Sign Assist and Adaptive High-beam System	✓	✓
All-wheel drive with E-Four	✓	✓
Front-wheel drive	Opt	✘
Driver & front passenger airbags	✓	✓
Driver & front passenger side airbags	✓	✓
Front passenger cushion airbag	✓	✓
Curtain Shield airbags front and rear	✓	✓
ABS	✓	✓
Electronic Brakeforce Distribution (EBD) with Brake Assist System (BAS)	✓	✓
Vehicle Stability Control (VSC)	✓	✓
Traction Control (TRC)	✓	✓
Vehicle Dynamics Integrated Management	✓	✓
Hill Assist Control (HAC)	✓	✓
Blind Spot Monitor and Rear Cross Traffic Alert	✓	✓
Tyre Pressure Warning System	✓	✓
ISOFIX child seat anchor points	✓	✓
Adaptive Variable Suspension	✓	✓
Speed-sensitive electric power steering	✓	✓
Electronic parking brake	✓	✓
E-Latch with Safe Exit Assist	✓	✓
eCall	✓	✓
INSTRUMENTS & CONTROLS	LM	LM TAKUMI
Drive Mode Select – 5 modes	✓	✓
Head-up display	✓	✘
Power-adjustable steering wheel	✓	✓
Touch tracer switches on steering wheel	✓	✓
AUDIO, NAVIGATION & INFORMATION	LM	LM TAKUMI
Lexus Link Pro multimedia system with four-year connected services subscription, cloud-based navigation, embedded navigation, voice assistant, 14in HD touchscreen and faster CPU	✓	✓
21-speaker Mark Levinson 3D Surround Sound system	✓	✘
23-speaker Mark Levinson 3D Surround Sound system	✘	✓
14in drop-down rear monitor with HDMI port	✓	✘
48in HD widescreen monitor with HDMI ports x2	✘	✓
USB x4 (2 front, 2 rear)	✓	✓

Bluetooth	✓	✓
Apple CarPlay (wireless)/Android Auto (wired) smartphone integration	✓	✓
Lexus Link connected services with over-the-air updates	✓	✓
7in information display in instrument binnacle	✓	✓
COMFORT & CONVENIENCE	LM	LM TAKUMI
Lexus Climate Concierge with dual-zone air conditioning and nanoe-X air quality system	✓	
Heated steering wheel	✓	✓
Power sunshades	✓	✓
Rain-sensing wipers	✓	✓
Smart Entry	✓	✓
Push-button start	✓	✓
Intelligent parking assist and auto-parking	✓	✓
Remote parking with Lexus Link app	✓	✓
Digital rear-view mirror	✓	✓
Reversing camera	✓	✓
Wireless smartphone charger in front cabin	✓	✓
Wireless smartphone charger x2 in rear cabin	x	✓
360-degree Panoramic View Monitor	✓	✓
LED interior lighting	✓	✓
LED ambient light (64 colours, 14 pre-sets)	✓	✓
Refrigerator in rear cabin	x	✓
Folding table in second row centre arm rest	✓	x
Folding tables (x2) in outer rear arm rests	x	✓
Centre partition between front and rear cabin with dimmable glass section	x	✓
SECURITY	LM	LM TAKUMI
Anti-theft system with alarm, intrusion, tilt and glass breakage sensors, engine immobiliser	✓	✓
Two-motion double door locking	✓	✓
Speed-sensitive auto door locking	✓	✓
VIN etching	✓	✓
Digital key (in addition to standard key)	✓	✓
Locking wheel nuts (Thatcham approved)	✓	✓
SEATING, UPHOLSTERY & TRIM	LM	LM TAKUMI
Two airline-style seats in rear cabin	x	✓
Five seats in rear cabin (x2 VIP + flip-up 2+1)	✓	x
Semi-aniline leather upholstery – second row seats with suede inserts	✓	x
Semi-aniline leather upholstery – rear seats with suede inserts	x	✓
Power-adjustable front seats – driver's seat with memory and 4-way lumbar support	✓	✓
Heated and ventilated front and second row seats	✓	✓

Power slide adjustment and air lumbar support on second row seats	✓	✗
Massage function on second row seats	✓	✗
Massage functions (7 programmes) on rear seats	✗	✓
Wood steering wheel trim	✓	✗
Leather steering wheel trim	✗	✓
EXTERIOR	LM	LM TAKUMI
Auto-folding, auto-dimming, heated door mirrors with reverse tilt function and integrated turn indicators	✓	✓
Rear privacy glass	✓	✓
Power tailgate with kick sensor	✓	✓
LED headlights with Adaptive High-beam System	✓	✓
LED daytime running lights	✓	✓
LED front fog lights	✓	✓
LED rear lights	✓	✓
LED turn indicators	✓	✓
Illuminated doorhandles with puddle lights	✓	✓
Integrated roof rails	✓	✓
Two fixed rear sunroofs	✓	✓
19in forged alloy wheels	✓	✓
Tyre repair kit	✓	✓
Metallic paint/premium metallic paint	Opt	Opt

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