

EV CONCEPI

exus Electrified, our vision for the adoption of electric lrivetrains at Lexus, takes advantage of electric drivetrain echnology to significantly advance a vehicle's basic erformance while providing joy of driving in a way hat will resonate in any era. The core technologies that hake this philosophy possible—motors, batteries, and hower control units—have already been incorporated into HV, PHV, and FCV vehicles, where they have helped hower these vehicles while taking us further toward lectrification and away from sole reliance on the engine.

At the forefront of this journey, the UX300e makes a bold step from HVs into the future of driving, embedding innovative technologies to redefine the premium driving experience, enhancing the uniqueness of Lexus and providing a new choice for customers seeking a luxury EV. In the UX300e, the evolution of quietness and ride comfort, direct driving feel, and clear handling response that only a pure EV can deliver, combine to offer urban residents the opportunity to transform their lifestyles.*

Core Electrification Technology

MOTOR









ENGINE		HV	
+	>		
ENGINE +	CHARGING + C	рни	<i>(</i> —
	CHARGING + C	EV CO	<i>(</i> —
FC STACK	HYDROGEN TANKS + T T ->	FCV	<i>(</i> —

* EV: Electric Vehicle. HV: Hybrid Vehicle. PHV: Plug-in Hybrid Vehicle. FCV: Fuel Cell Vehicle.



The UX300e boosts the high basic performance characteristics of an EV, linear acceleration, dynamic handling and quiet operation, to create a new generation of Lexus driving pleasure. The low center of gravity and balanced weight distribution of the battery placement help realize exceptional stability and maneuverability, together with smooth seamless acceleration. Drive mode select further personalizes vehicle response for driving enjoyment.



Platform

The advanced Lexus GA-C (Global Architecture-C) platform forms the backbone of the UX300e, providing the foundation that leverages the core elements of dynamic electric performance: accelerating, cornering and braking. The low position of the electric motor and mounting the battery pack under the floor of the high rigidity body contribute to a very low center of gravity close to the driver's hip point, and optimal front/rear weight distribution. The result is an excellent yaw inertia moment that creates a feeling of unity between the vehicle and driver, further enhancing the distinctive performance characteristics and driving pleasure of an EV.



To provide a serenely quiet cabin befitting an EV, careful attention was paid to how occupants perceive noise and vibration in the absence of the usual engine and transmission noises. Underfloor covers complement the suppression of road noise by the battery, while noise-absorbing material in the fender liners helps to absorb tire noise. Acoustic glass in the windows reduces high frequency wind noise.





High-rigidity body

To create a strong yet light body suitable for an EV, hot-stamp and high-tensile steel were used in key body components including the underbody, together with aluminum for the hood and side doors, and resin for the back door. Body rigidity was strengthened by attaching the battery pack directly to the floor, tying the front cross member the motor is mounted on to the front side members, and adopting a 3D annular structure in the rear. Extensive use of technologies including laser screw welding and structural body adhesive further enhance rigidity, contributing to the agile handling and excellent steering response and feedback.

Aerodynamics

In the pursuit of outstanding aerodynamic performance befitting an EV, the UX300e combines bold design with innovative enhancements to the upper body, under body and wheels.

Like the UX, the front and rear fenders feature aero stabilizing arch moldings to enhance roll stability while cornering. In addition, vertical fins on the outer edges of the aero stabilizing blade lights smooth rearward airflow, to enhance driving stability. The flat underbody structure prevents deceleration of the airflow under the vehicle to help minimize drag.



EV system

The EV system builds on Lexus's extensive expertise in hybrid technology to blend exceptional performance with the peace of mind expected of a future-focused vehicle. By realizing outstanding efficiency in key system components, the motor, inverter, transaxle and high-capacity battery contribute to smooth, powerful acceleration response and performance. It is combined with an emphasis on advanced safety and functionality, with an over-charging prevention system and a multi-monitoring safety net to detect any possible electrical problems in the unlikely event they occur.

Motor

Compact and lightweight, the permanent magnet motor was specifically developed to deliver both high output and exceptional efficiency. While braking, the motor is activated as a generator to convert the moving vehicle's kinetic energy into electricity to charge the battery.

Battery

The high-capacity battery was designed to factor in practical driving range, dynamic performance and reliability to provide sufficient capacity for confident daily driving, while enabling a lightweight, high-rigidity body with ample space in the cabin. Advanced systems control use of the air conditioning, the battery temperature for reliable operation in extreme conditions, and to recover power from regenerative braking among others.





Suspension

The MacPherson strut front suspension and trailing arm-type double wishbone rear suspension were fine-tuned specifically for the unique characteristics of an EV to provide dynamic acceleration response with elegant ride comfort. An acceleration control system suppresses the sudden lift that can be generated during initial acceleration due to the EV's ability to deliver a sharp increase in initial torque, and it is further dampened by tuning of the suspension. In addition, a brace that secures both sides of the manual steering gearbox to the front suspension member enhances rigidity, contributing to a clear steering feel from start-up.





ASC (Active Sound Control)

ASC highlights the UX300e's 'human-centered' approach to driving. Because the EV has no engine and transmission, there is no sound when accelerating to communicate a sense of speed. To provide aural feedback to the driver, ASC generates an audible motor drive sound when accelerating, that was refined to be pleasant to the human ear. While cruising at a consistent speed, the sound drops away to provide an exceptionally quiet cabin. ASC can also be switched off.

Drive mode select

Drive mode select provides integrated control of multiple systems to let you directly experience the enhanced driving performance characteristics of the motor and quick increase in initial torque. You can select and change between three modes: Eco for energy efficient driving; Normal for balanced driving performance with energy efficiency; and Sport for sporty driving with enhanced steering feel and acceleration response.



Paddle shift switches on the steering wheel enable the driver to switch between 4 levels of deceleration or regenerative braking to suit their natural driving style and feeling of control. The levels range from providing the driving feel of a gasoline-powered car to harnessing the linear deceleration of a pure EV. The optimum deceleration level can be changed to suit situations such as frequent stop-and-go driving in the city or driving on winding roads, without having to brake constantly. Range can be extended as a result.





Note: Vehicles pictured and specifications detailed in this catalog may vary from models and equipment available in your area. Please inquire at your local dealer for details on the availability of features.

15



Meter

The 7-inch color TFT (Thin Film Transistor) Optitron meter provides excellent visibility of key information contributing to confident driver control. Unique to an EV, it displays deceleration and potential cruising range remaining until charging, as well as select information from the 10.3-inch EMV (Electro Multi-Vision) display. A large color head-up display is positioned in the driver's line of sight.

Shift knob

The short-stroke shift knob with shift-by-wire system supports quick, precise shifting. Carefully positioned within easy reach for intuitive operation, meticulous attention was paid to the leather finish to provide both a tactile feel and sophisticated appearance befitting a Lexus EV.



Lexus Climate Concierge/Rear seat heaters

The Lexus Climate Concierge realizes a humancentered approach to personalized comfort. Designed for energy efficiency to minimize demand on the EV's battery and range, it takes a fresh approach to realizing a comfortable interior space with highly-efficient cooling and heating performance, including direct warming of the front seats and steering wheel. Heaters integrated in the outboard rear seats enhance occupant comfort.





Luggage space

The ample luggage space highlights the practical convenience of the packaging and thoughtful design, with room to accommodate a baby buggy. For longer items and larger loads, the 60/40 split rear seatbacks fold down to create various passenger and luggage configurations.

Charging system

Two charging inlets, an AC inlet and a DC inlet, are integrated into the rear of the car. The charging system realizes enhanced usability, high power and efficiency to reduce charging time. A charging indicator on the AC charging port lid alerts you to charging activity, while an indicator in the multi-information display lets you monitor the amount of battery charge remaining. The My Room function lets you use the audio programs, air conditioning, seat heaters and other features while charging.







AC charging inlet



LEXUS SAFETY SYSTEM +



LTA (Lane Tracing Assist)

When Lane Tracing Assist with enhanced lane recognition is activated, it alerts the driver of possible lane or road deviations even when lane markings are interrupted, and helps assist steering to avoid them. In addition, while driving on highways and automobile-only roads with Dynamic Radar Cruise Control activated, it helps assist steering to keep the vehicle in the lane.

LDA (Lane Departure Alert)

LDA alerts the driver of possible lane or road deviations and helps assist steering to avoid them, when LTA is not active.

Dynamic Radar Cruise Control

In addition to maintaining a constant speed, Dynamic Radar Cruise Control uses the millimeter-wave radar and camera sensors to detect a vehicle driving ahead and maintain an appropriate distance between vehicles.

Pre-Collision System

When the millimeter-wave radar and monocular camera sensors detect a vehicle ahead, a pedestrian during the day or at night, or a cyclist during the day*¹ and determine that a collision is likely, it alerts the driver and activates pre-collision brake assist when the driver depresses the brake pedal. If the driver cannot depress the brake pedal, it activates the pre-collision brake to help avoid a collision or mitigate the impact force.



Adaptive High-beam System (AHS)

The system uses a monocular camera sensor located on top of the vehicle to detect light from vehicles in front and automatically optimizes the headlamp light distribution so that the high beams do not directly illuminate preceding or oncoming vehicles.

This allows drivers to enjoy their most vividly lit night-time drive, providing exceptional visibility while delivering calmer driving conditions, without the need to repeatedly alternate between high and low beam.



Parking Support Alert (PKSB)

Through clearance sonars, the Parking Support Brake detects obstacles around the whole of the vehicle, and applies drive force control and enhanced braking power at low speeds. If static objects such as walls are detected at the front and rear, the driver is alerted by a buzzer, the hazard is displayed and the brakes are applied using brake force control. If an obstacle is detected from the rear through the Rear Cross Traffic Alert, the Parking Support Brake will notify the driver and attempt to stop the vehicle to avoid a collision.

Rear Cross Traffic Alert (RCTA)

When backing out of a parking space, the backup camera displays your rear view on the multimedia display and the Rear Cross-Traffic Alert alerts you of vehicles approaching from either side.



Blind Spot Monitor System

When the quasi-millimeter-wave radars in the rear bumper detect vehicles in adjacent lanes that aren't visible in the door mirrors, the system activates an LED warning indicator in the relevant door mirror the moment a vehicle enters this blind spot.



Panoramic View Monitor

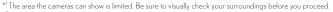
To help check areas surrounding the vehicle that are difficult to see from the driver's seat, the system shows a bird's-eye view of the vehicle in real time on the 10.3-inch EMV display, using a composite image taken by cameras mounted on the front, sides, and rear of the vehicle.*



22

SRS (Supplemental Restraint System) airbags

The UX features dual-stage SRS airbags (Front seats), SRS knee airbags (Front seats), SRS side airbags (Front seats) and SRS curtain shield airbags (Front and rear seats).*2



^{*2} The SRS airbags are supplemental devices to be used with the seatbelts. The driver and all passengers in the vehicle must wear their seatbelts properly at all times. Never install a rear-facing CRS (Child Restraint System) on the front passenger's seat. For a forward-facing CRS, it is recommended you use it in the rear seats. Please do not use accessories for the seats which cover the parts where the SRS side airbags should inflate. Such accessories may prevent the SRS side airbags from activating correctly, causing serious injury (Lexus genuine seat covers are specifically designed for models equipped with the SRS side airbags. To find out about availability in your area, please inquire at your local dealer). The photo shows all the SRS airbags activated for display purposes only (the SRS side and curtain shield airbags only inflate on the side of the collision in an actual accident). For details on these and other important safety features, be sure to read the Owner's Manual carefully.

Note: The systems functions may not operate properly depending on the weather, road and vehicle conditions or other factors. Be sure to read the Owner's Manual carefully. Do not overly rely on these systems, as there is a limit to the performance they can provide. The driver is always responsible for paying attention to the vehicle's surroundings and driving safely.

Vehicles pictured and specifications detailed in this catalog may vary from models and equipment available in your area. Please inquire at your local dealer for details on the availability of features.

EXTERIOR & INTERIOR COLORS

The concept behind the captivating colors for the UX is 'Toughness yet Luxury,' expressing the toughness of a crossover and the luxury of Lexus-style textures. A fresh and contemporary palette of exterior and interior colors is complemented by the unique textures and premium quality of the upholstery and trim.



Sonic Quartz < 085>



Sonic Chrome <1L1>



Mercury Grey Mica <1H9>



Black <212>



Sonic Titanium <1J7>



Madder Red <3T2>



Graphite Black Glass Flake <223>



Blazing Carnelian Contrast Layering <4Y1>



Terrane Khaki Mica Metallic <6X4>



Celestial Blue Glass Flake <8Y6>



18-inch aluminium wheels, medium grey

23

<SMOOTH LEATHER>



Cobalt



Rich Cream



Black Ocher



Black

<SMOOTH LEATHER>



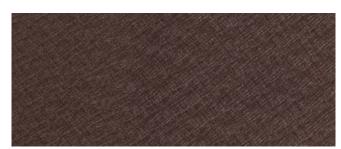
<TRIM>



Washi (Japanese paper grain)/Blue



Washi (Japanese paper grain)/Black



Washi (Japanese paper grain)/Noble Brown

		IN.	NTERIOR COLOR	RS	
SEATING MATERIAL	Black	Ocher	Rich Cream	Cobalt	White Ash
Smooth Leather (Sashiko-style stitch)	•	•	•	•	•

	INTERIOR COLORS				
TRIM	Black	Ocher	Rich Cream	Cobalt	White Ash
Washi (Japanese paper grain)	•	•	•	•	•

26

25

[:] Available combination.

SPECIFICATIONS

ENGINE	UX 300e MOTOR
Motor Generator	Permanent Magnet Synchronous Motor
Drive	Front-wheel Drive
Transmission Type	Triple axes, 2-stage reduction
Max. Output	150 kW (201 bhp)
Max Torque	300 Nm
Max Speed	160 km/h
Acceleration (0-100km/h)	7.5 seconds
Energy Consumption	15.0 kWh/100km
Carbon Dioxide Emissions	Og/km
Range	360km (NEDC) / 300km (WLTP)
VES Banding	A1
UX 300E BATTERY	
Battery Type	Lithium Ion
Battery Capacity	54.3 kWh
Number of Battery Cells	288
DC Charging Type	CHAdeMO DC (50kW)
AC Charging Type	Type 2 AC (6.6kW)
CHASSIS	
Brake System	ECB (Electronically Controlled Brake system)
Brake (Front)	Ventilated Disc Brake
Brake (Rear)	Ventilated Disc Brake
Suspension (Front)	MacPherson Strut
Suspension (Rear)	Double Wishbone
Steering System	Electric Power Steering
MEASUREMENTS	
Length	4,495 mm
Width	1,840 mm
Height	1,545 mm
Wheelbase	2,640 mm
Tread (Front)	1,550 mm
Tread (Rear)	1,560 mm
Min. Turning Radius (Tyre)	5.2 m
Kerb Weight	1,785 kg
Gross Vehicle Weight	2,245 kg
Boot Capacity	314L



27





Note: Please inquire at your local dealer for details on the availability of features.

FEATURES

ULTIMATE COMFORT	UX 300e
Electrically Adjustable Steering Wheel	•
Original Factory-fitted Upholstery	Smooth Leather
Power Adjustable Front Seats	8-way (D+P)
Seat Lumbar Support (Driver Only)	•
Air Ventilated Front Seats	•
Dual-Zone Independent Climate Control w/ S-Flow & 'Dual-Zone independent Climate Control with S-Flow & nano-eX TM	•
Register Knob Illumination	•
Acoustic Windshield	•
INTUITIVE TECHNOLOGY	
MART Keyless Go w/ Card Key	•
.ED Triple-Projector Headlamps w/ Adaptive High Beam (AHS)	•
.ED Daytime Running Lights	•
.ED Front & Rear Fog Lamps + Cornering Lamps	•
Flat Underbody Structure	•
Door Handle Illumination	•
Electric Power Steering (EPS)	•
Paddle Shifters	•
Rain Sensing Wipers	•
Dynamic Radar Cruise Control (DRCC)	•
Shift-by-wire Leather Shift Knob	•
EC (Electro Chromic) anti-glare Inner Mirror	•
Auto-folding EC anti-glare Aspherical Outer Mirror (w/, Heater & Reverse-linked tilt Function)	•
Orive Mode Select (Eco/Normal/Sport)	•
7" Digital Speedometer and Multi-Information Display	•
Colour Head-up Display (HUD)	•
V Range Indicator (WLTP)	10.2"
EXUS Integrated Display Screen w/ Navigation	10.3"
.EXUS Remote Touch Interface	•
Mireless Charger Hands Free Power Back Door w/ Kick Sensor	•
Roof Rails	•
Active Sound Control (ASC)	•
Front and Rear Performance Rod / Damper	•
AUDIO & ENTERTAINMENT Mark Levinson Premium Surround Sound System with 13 Speakers	•
Apple CarPlay & Android Auto	•
AM/FM Tuner & DVD Player	•
Bluetooth Connectivity	•
4 x USB Ports (Front & Rear) & AUX Jack	•
360° PROTECTION	
LEXUS Safety System+ (DRCC, PCS, LTA, AHS)	•
Lane Tracing Assist (LTA)	•
Blind Spot Monitor (BSM) w/ RCTA (Rear Cross Traffic Alert)	•
Parking Brake Support (PKSB)	•
LEXUS Parking Assist System (FR:4 RR: 4)	•
Parking Assist Monitor (w/ Distance Guidelines)	•
360° Panoramic View Monitor	•
8 SRS Airbags	•
Control Systems: ACA / ABS / BA / EBD / TRC / VSC / Hill-Start Assist / Brake Hold	•
Tire Pressure Warning System (TPMS)	•
ISOFIX Anchors	•
RIMS & TYRES	
225/50R18 Medium Gray Metallic Wheels with Machined Finished	•
CHARGING	
CHAdeMO DC (50kW) [Left]	•

