

# INSPIRED BY NATURE





500+ KM  
RANGE

e-ATA 12 HYDROGEN

KARSAN

16 HYD 34

## ENERGY OF NATURE, MESSENGER OF A NEW AGE

Pure energy was born at "that moment"  
when everything started. Hydrogen became life, became power  
and inspired Karsan's electric evolution with its energy.  
And now, it has come to life in the technology of the future with  
e-ATA HYDROGEN.

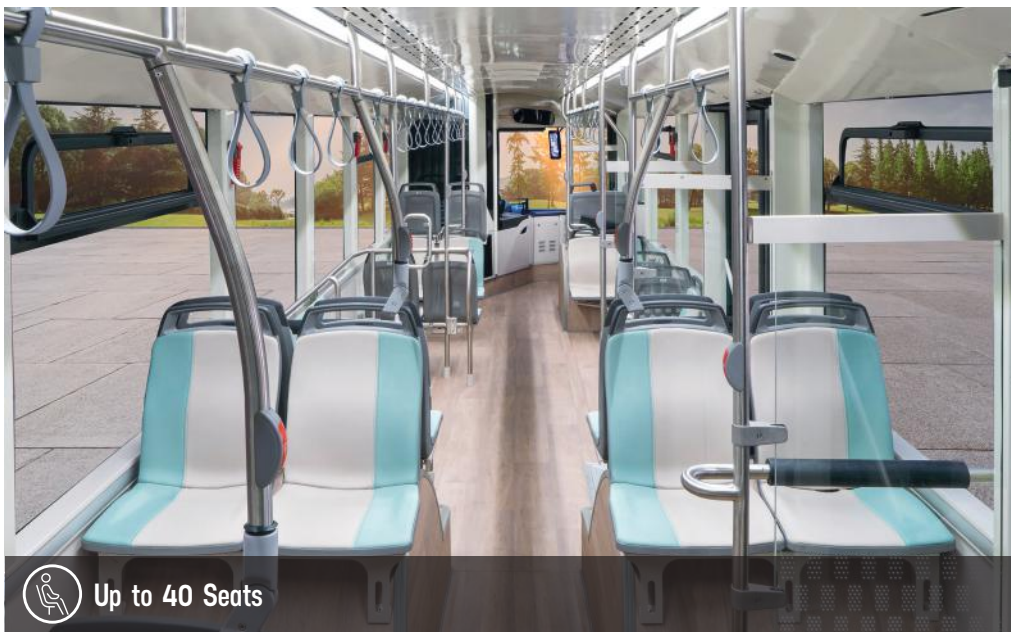




1.687 lt Hydrogen Tank Volume



≤7 Minutes Refuelling Time



Up to 40 Seats



97 kW Fuel Cell



## PROTECTING THE NATURE? IT IS THE NATURE ITSELF

Hydrogen, the essential element of water, our fountain of life, is also the fountain of Karsan e-ATA. The renewable cycle and complementarity of nature is a true example of wisdom and source of inspiration. Technologies of the future are powered by the nature. Because the future is the nature itself!



100%  
Zero Emission





## HYDROGEN POWER

The stored hydrogen passes into the fuel cell, hydrogen and oxygen enter into a chemical reaction. When hydrogen undergoes a chemical reaction in a fuel cell with a power of 97 kW, the electrical energy that emerges, gives power to e-ATA HYDROGEN, while also charging the battery.

## SAFETY

e-ATA HYDROGEN, thanks to its high pressure resistant tank systems, valves that evacuate the gas in case of an emergency and highly acclaimed sensors that automatically close, provide safe travel to the drivers and passengers.



## SMART DRIVELINE MEETS COMFORT

e-ATA HYDROGEN is promising ultimate comfort with its silent electric hub motors and independent front axle, providing both the passengers and the driver a pleasant journey.

## FEEL THE ERGONOMY IN EVERY DETAIL

Designed down to the last need, e-ATA HYDROGEN provides high comfort to the driver with wide views and VDV-compatible ergonomic driver cabin.

## COMFORT AND TECHNOLOGY COMES TOGETHER

Heated driver seat, heated windshield, digital dashboard and cruise control are only a few of the details that make e-ATA HYDROGEN essential.



## TAKE CONTROL

Without having to take your eyes off the road, monitor a wider angle with camera-mirrors placed at your eye level. The wide angle rearview allows you to easily maneuver in narrow streets and have a clear vision during the night.

Illuminating the blind spots where the human eye is unable to see, ADAS system assures you of a safe journey. Cameras and warning screens placed at critical points allow you to see passengers, cyclists and any object in the blind spots.



Mirror Camera

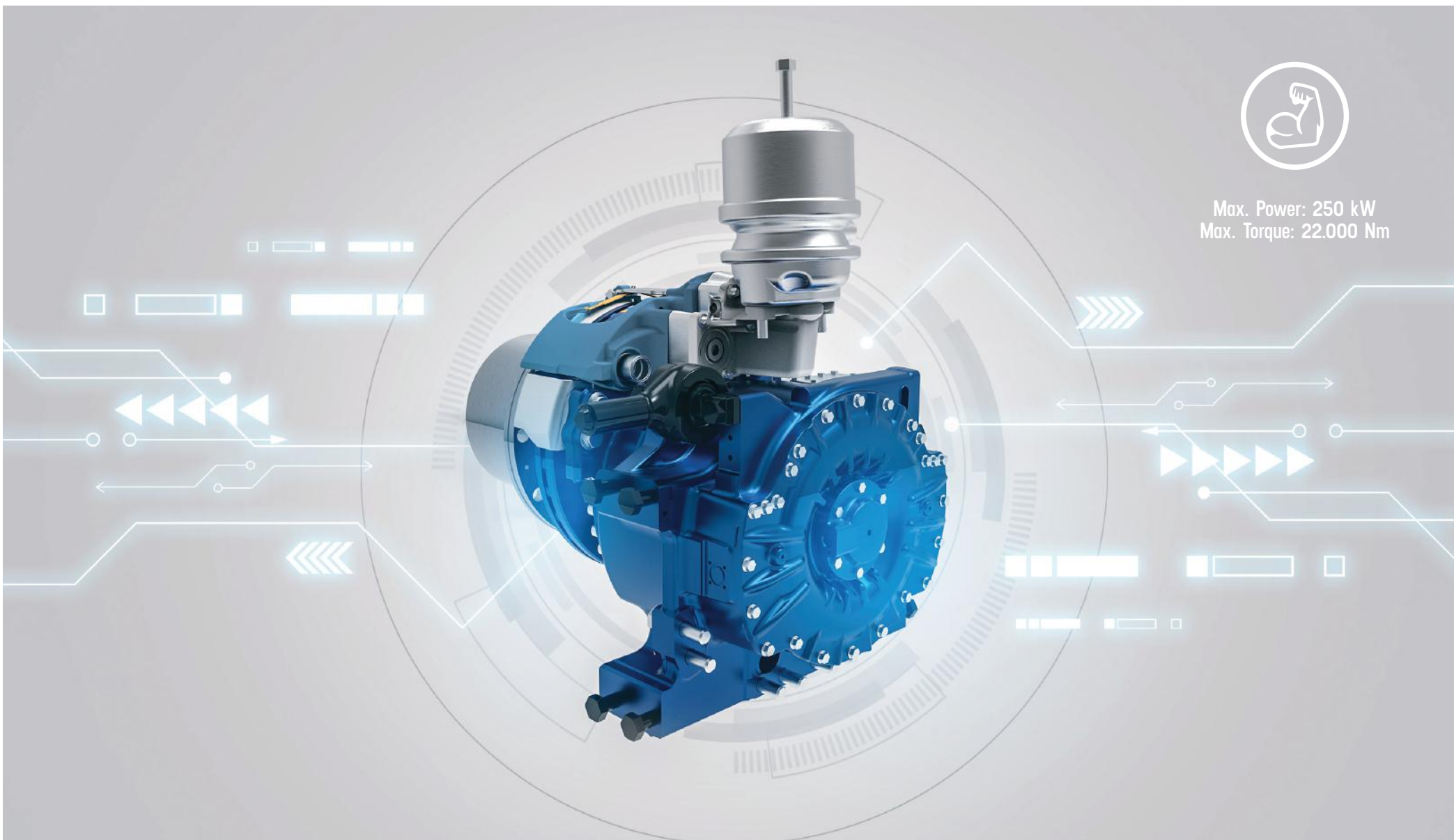


Screen of Mirror Camera



ADAS - Advanced Driving Assistant System





## HIGH-PERFORMANCE WITHIN

Offering much stronger performance than diesel, e-ATA HYDROGEN defies tough road conditions no matter how steep, narrow or bumpy. Providing 250 kW power and 22.000 Nm torque, e-ATA HYDROGEN offers superior traction power with its electric hub motor.

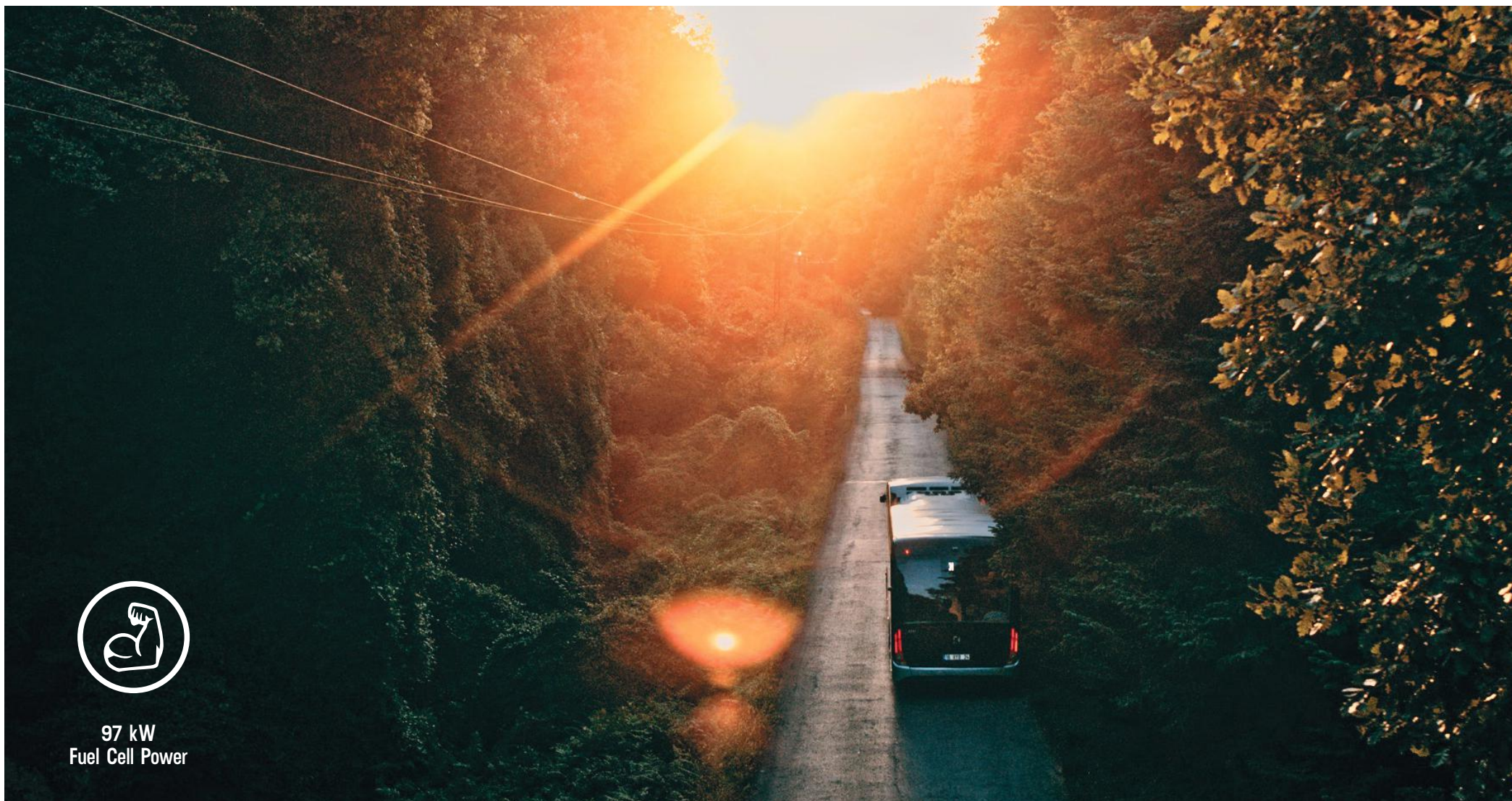




## COMFORT DURING THE ENTIRE JOURNEY

Have a quiet journey with e-ATA HYDROGEN's spacious interior, wide panoramic view, fabric or plastic passenger seats, and electric motor! Feel the comfort after taking the step into the full low floor e-ATA HYDROGEN.





## STRONG PERFORMANCE UNDER ANY CONDITION

Strong performance and range that is not affected by outside temperature as well as being stronger and lighter.

## PROTECT YOUR CITY, TIME AND PLANET

Higher efficiency, more durable and faster. What remains of its smaller battery is pure water vapor.

As the world population increased, depleting natural resources, expanding energy demand and search for solutions against carbon emissions introduced us to electric vehicles.



TECHNICAL SPECIFICATIONS

FEATURES

VEHICLE TYPE	
Vehicle Category & Class	Full Low Floor Electric Bus, M3 Category, Class I, LHD
POWERTRAIN SYSTEM	
Drive Type	Hub Electric Motor
Maximum Power (kW)	250
PERFORMANCE & ELECTRIC SYSTEM	
Range (km) <sup>1</sup>	500+
Max. Speed (km/h)	80
High Voltage Battery (Type - Capacity)	LTO - 43,5 kWh
Fuel Cell Power (kW)	97
Hydrogen Tank Volume (lt)	1.687
BODY & SUSPENSION SYSTEM	
Body Type	Carbon Steel: Space Frame Steel Tube Structure
Corrosion Resistance	Cataphoresis & Underbody Coating
Front Axle	Independent
Rear Axle	Electric Portal Axle
Door Arrangement	2 or 3 Door Options
Tires	275/70 R22.5
Suspension	Air Suspension, Electronic Leveling, Kneeling Function
Brake System	ABS, ASR, EBS, Regenerative Braking System
WEIGHT & DIMENSIONS	
Gross Vehicle Weight (kg)	19.000 (19.500 Optional)
Overall Length (mm)	12.220
Overall Width (mm)	2.550
Overall Height (mm)	3.350
SEAT & PASSENGER CAPACITY	
Maximum Seat Capacity <sup>2</sup>	40 Seats
Passenger Capacity <sup>3</sup>	± 90

<sup>1</sup> Under realistic conditions. Range may change with driving profile.  
<sup>2</sup> May change with door arrangement and seat layout.  
<sup>3</sup> May change with battery capacity, seat layout, door arrangement, GVW and technical gross axle value depending on country of registration.



STYLE	
Exterior Design	
LED Front & Rear Lights	S
LED Day Time Running Lamps	S
Front Fog Lamp	S
Cornering Lamps	O
3rd Stop Lamp <sup>1</sup>	O
Electrical and Heated Pipe Type Mirrors	S
Electrical and Heated Horn Type Mirrors	O
Mirror Cameras	O
Light Tinted Color Side Glass	S
4 Transom Side Window	O
Double Glass Windows <sup>1</sup>	O
Heated Windscreen	O
Sliding Heated Driver's Window	S
Metro Type Sliding Doors	O
Monocolor LED Destination Signs Preperation (Front + Side + Rear)	S
Monocolor LED Destination Signs (Front + Side + Rear)	O
Front & Rear 22.5" Steel Wheels	S
Mudguard Set	O
Wheel Nut Covers	S
Cataphoresis & Underbody Coating	S
Front & Rear Towing Hook	S
Flag Holder	O
Body Color: White	S
Roof Color: White	S
Special Body Color	O
Special Roof Color	O
Interior Design	
Anti-Slip PVC Floor Cover	S
Handrail Tubes, Yellow	S
Handrail Tubes, Stainless Steel	O
Handgrips	O
Stop Signs + Digital Clock + Temperature Indicator	S
Anchor Cable Type Emergency Hammer	S
Billboard	O
TECHNOLOGY	
Charging Infrastructure	
Charging Plug for Batteries	O
Driver Compartment	
Full Digital Cluster	S
Rear Park Sensors	S
Tire Pressure Monitoring System	S
Ticket Validator Preparation	O
Smart Tachograph	S
Cup Holder	O
Wardrobe Coat Hook	O
Telematics System	S
FMS Socket	S
Passenger Compartment	
Passenger Counting System	O
Passenger Information System	O
Wi-Fi Infrastructure	O

S: Standard / O: Option

Audio & Video Systems	
MP3 Player + USB + Aux	O
Announcement System for Passenger Area	O
External Speakers <sup>1</sup>	O
Dasboard Mounted 7" LCD Screen, Rear Cam	O
Roof Mounted Fixed 19" LCD Screen	O
COMFORT	
Cooling & Heating	
Passenger A/C with Heating Function	S
Driver A/C with Heating Function	S
Passenger Sidewall Heaters	O
Electrical Heater	S
Passenger A/C with CO2 & Heating Function	O
Vehicle Pre-Conditioning <sup>1</sup>	O
Air Purifier System	O
Driver Compartment	
8-Way Pneumatic Driver Seat with 3-Point Seat Belt (SEGE)	S
8-Way Pneumatic Driver Seat with 3-Point Seat Belt (ISRI)	O
Driver Seat with Heating Function	O
Isolated Cabin	S
Separated Driver Cabin with High Glass	O
Front Manuel Sun Visor (Driver)	S
Front Electrical Sun Visor (Driver)	O
Driver Side Window Manuel Sun Visor	O
Cruise Control	O
Passenger Area	
Plastic Type Passenger Seats	S
Plastic Type Passenger Seats with Upholstery	O
Backrest Totem and Wheelchair Designations	S
Manual Wheelchair Access Ramp	S
Electric Wheelchair Access Ramp <sup>1</sup>	O
Double Electric Wheelchair Access Ramp <sup>1</sup>	O
USB on Sidewalls (Type A + Type C)	S
Door Opening Button (Outside) (For Passenger) <sup>1</sup>	O
Door Opening Button (Inside) (For Passenger) <sup>1</sup>	O
Only Rear Side Door Inside Mirrors	O
Hand Luggage Area	O

SAFETY	
GSR Package <sup>2</sup>	S
Cyber Security <sup>3</sup>	S
Electronic Parking Brake	O
ESP - Electronic Stability Program	S
AVAS - Acoustic Vehicle Alerting System	S
EBS - Electronic Brake System	S
ABS - Anti-Lock Braking System	S
ASR - Anti-Slippage System	S
RBS - Regenerative Brake System	S
HSA - Hill Start Aid	S
Front Anti Roll Bar	S
Rear Anti Roll Bar	S
Fire Detection System	S
Reverse Gear Buzzer	S
First Aid Kit - Red Cross	O

<sup>1</sup> Option can be offered during tender process.  
<sup>2</sup> Includes: Emergency stop signal, Tyre pressure monitoring system, Blind spot information system, Reversing information system, Moving off information system, Alcohol Interlock Facilitation Installation, Driver drowsiness and inattention warning, Intelligent speed assistance.  
<sup>3</sup> Includes: ECE R.155: Protection of vehicle against cyberattacks; ECE R.156: Software update and software updates management system.



