# The ALL-NEW BYD eBus BD11 **0** Emissions 100% Electric ★ Customization ★ Modularization

#### BYD (U.K.) Co., Ltd.

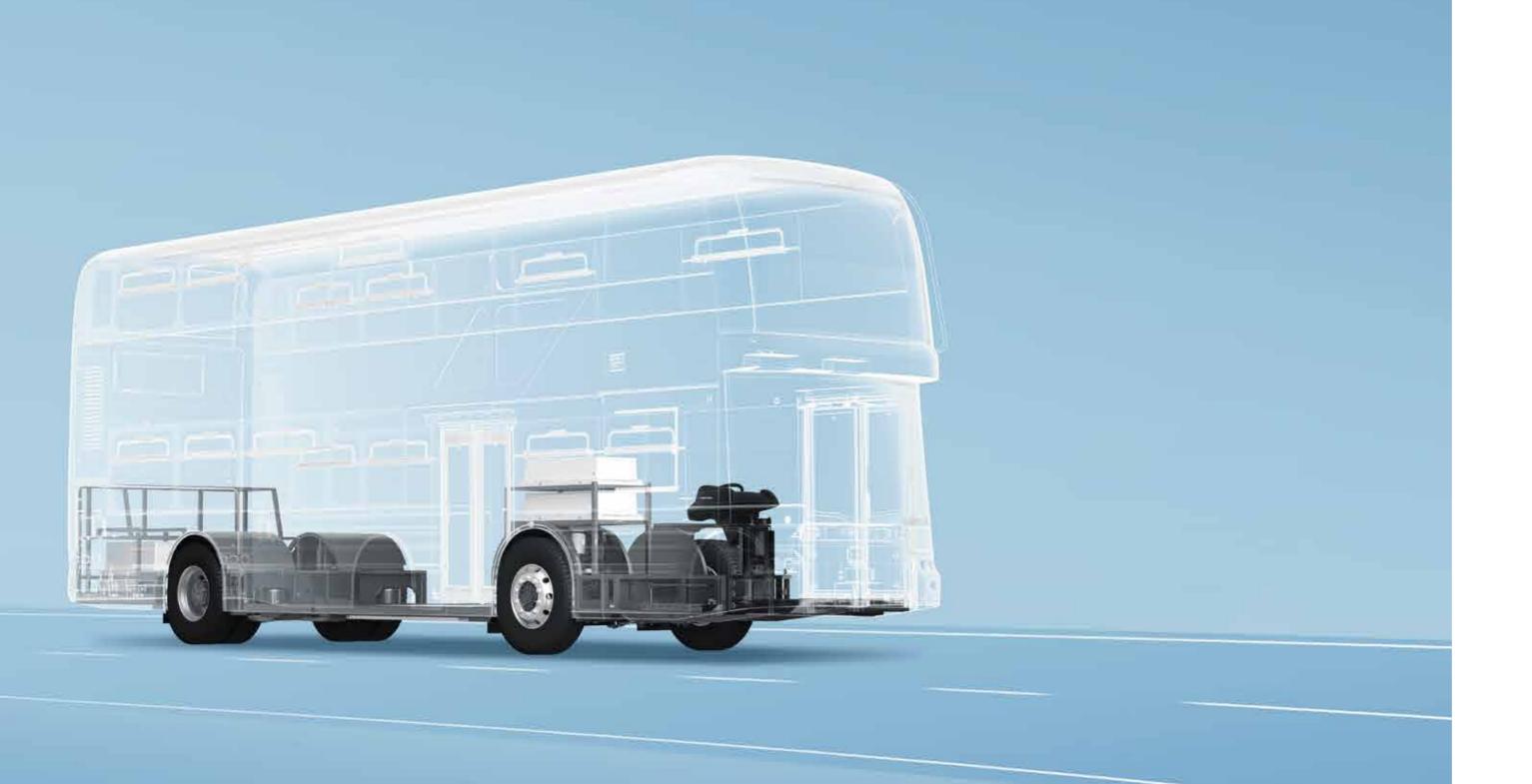
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# Outstanding performance Generous capacity

- Up to 532 kWh battery capacity
- Up to 90 passengers

Elegantly designed with passenger comfort and safety in mind, the BYD BD11 pure-electric double deck bus also offers an impressive capacity, accommodating up to 90 passengers, optimising operator efficiencies on popular routes.

The spacious interior provides ample upper and lower deck seating arrangements while still prioritising passenger comfort during transit. The upper deck offers passengers enhanced head height and the benefit of great views during journeys, while the lower deck also accommodates wheelchair access.

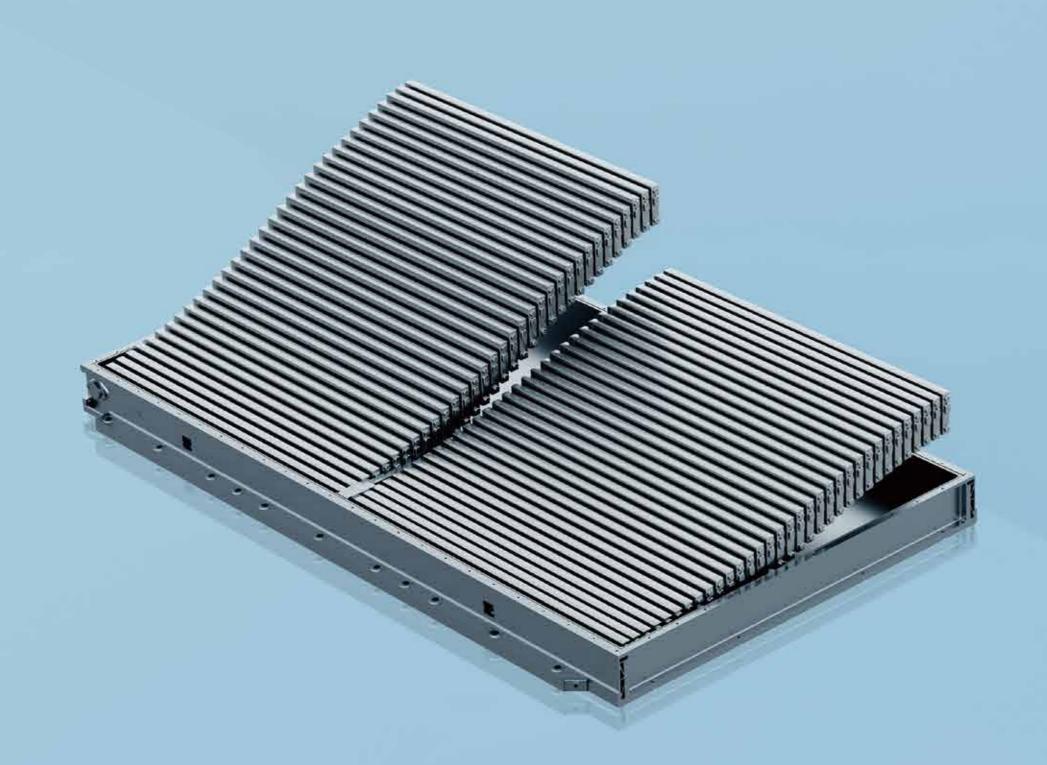
With market leading battery capacity, the all-new BYD BD11 is an ideal choice for high-demand routes, providing exceptional range, efficient passenger service and eco-friendly transportation.

## **Maximum safety**

Always prioritising safety, the BYD BD11 offers a comprehensive range of advanced safety equipment and driver assistance, as well as various certifications, supporting security and safety credentials.

- Advanced Emergency Braking System (AEBS)
- Driver Drowsiness and Attention Warning (DDAW)
- Blind Spot Monitoring (BSM)
- Forward Collision Warning (FCW)
- Intelligent Speed Assistance (ISA)
- Alcolock
- R155/R156 Cybersecurity and software update certification





#### **BYD Blade Battery**

BYD has been a pioneering name in the battery industry for more than 29 years. Our latest game-changing Blade Battery has passed a series of extreme tests in rigorous conditions making it one of the world's safest batteries with excellent thermostability.

#### **Enhanced safety:**

The Blade Battery has safely passed the Nail Penetration Test without emitting fire or smoke.

#### **Optimised strength:**

Arranged in an array in one pack, each cell serves as a structural beam to help withstand forces.

#### Longer range:

The volume utilisation efficiency of the Blade Battery has been increased by over 50% compared with the traditional battery packs, which provides enhanced energy density, delivering a longer range.

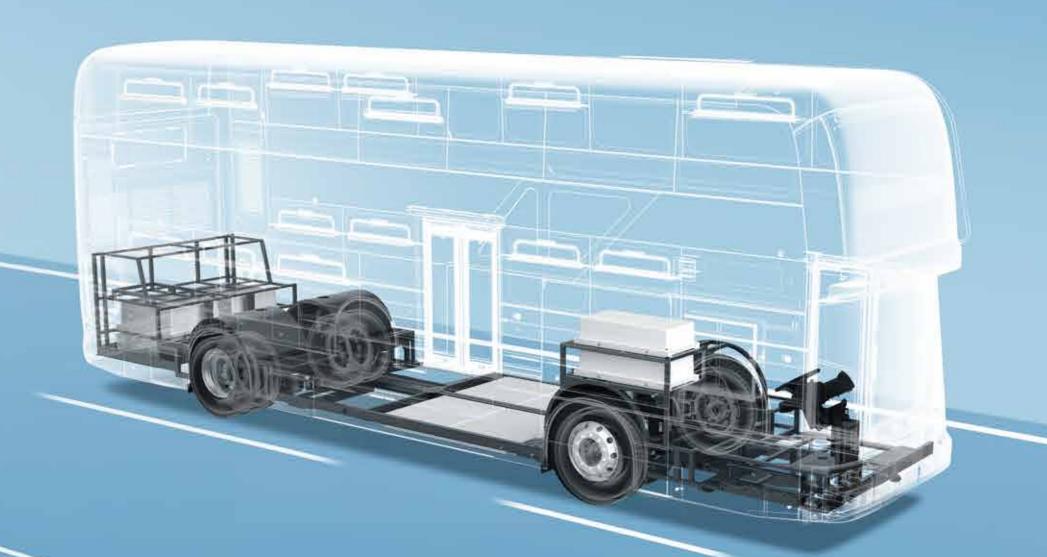
#### Longer lifecycle:

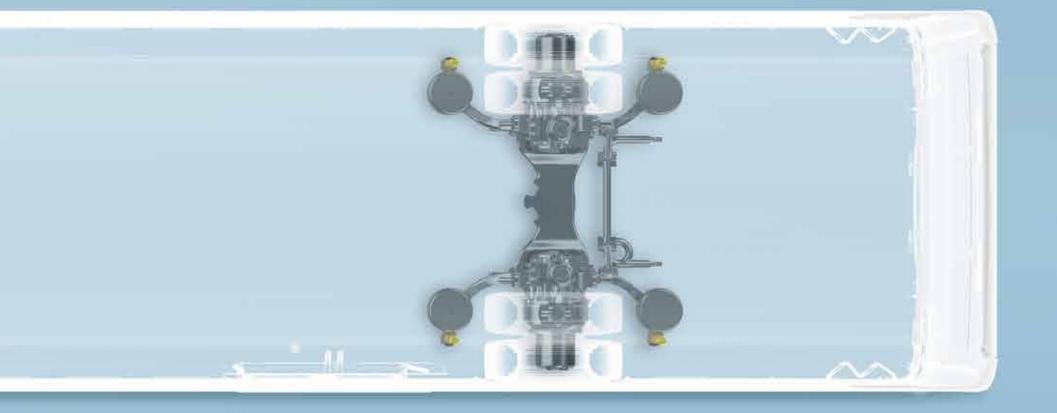
The Blade Battery has a 10 year – 80% SOH warranty as standard.

## Blade Battery integration within the chassis

The BYD BD11 revolutionary battery integration within the chassis has multiple advantages. The batteries ingeniously form part of the structure of the vehicle, increasing torsional stiffness, enhancing stability and maneuverability. The overall bus weight is also reduced by 8% thus increasing the range and reducing energy consumption.

The integrated battery system also enables a more spacious and pleasant passenger environment.





# 6-in-1 Integrated Controller with Silicon Carbide technology

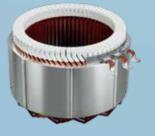


The BYD BD11 incorporates the unique BYD 6-in-1 controller that integrates 6 major electric elements in one plug and play set (2 electric motor control units, 1 steering control unit, 1 air compressor controller, 1 DC-DC converter and 1 power distributor unit).

This allows for quick and convenient 'on the road' changeover and reduces downtime. In addition, the 6-in-1 BYD controller uses cutting-edge Silicon Carbide (SiC) technology.

The SiC modules yield an impressive 99.5% efficiency with a 15% weight reduction compared to traditional controllers.

#### **Hairpin Motor**



This innovative bus is equipped with two 150kW hairpin motors for maximum energy efficiency.

This advanced technology combines flat wire and an oil-free solution, resulting in a 15% weight reduction.

The motor operates at an impressive 95.5% efficiency with very low motor noise levels. It offers a power boost of up to 600 N·m torque, providing responsive acceleration, especially beneficial on steep inclines and for quick starts, delivering a dynamic driving experience and enhanced overall performance.

By pushing the boundaries of motor design, the BYD BD11 ensures optimal power delivery and a quieter, more comfortable ride.

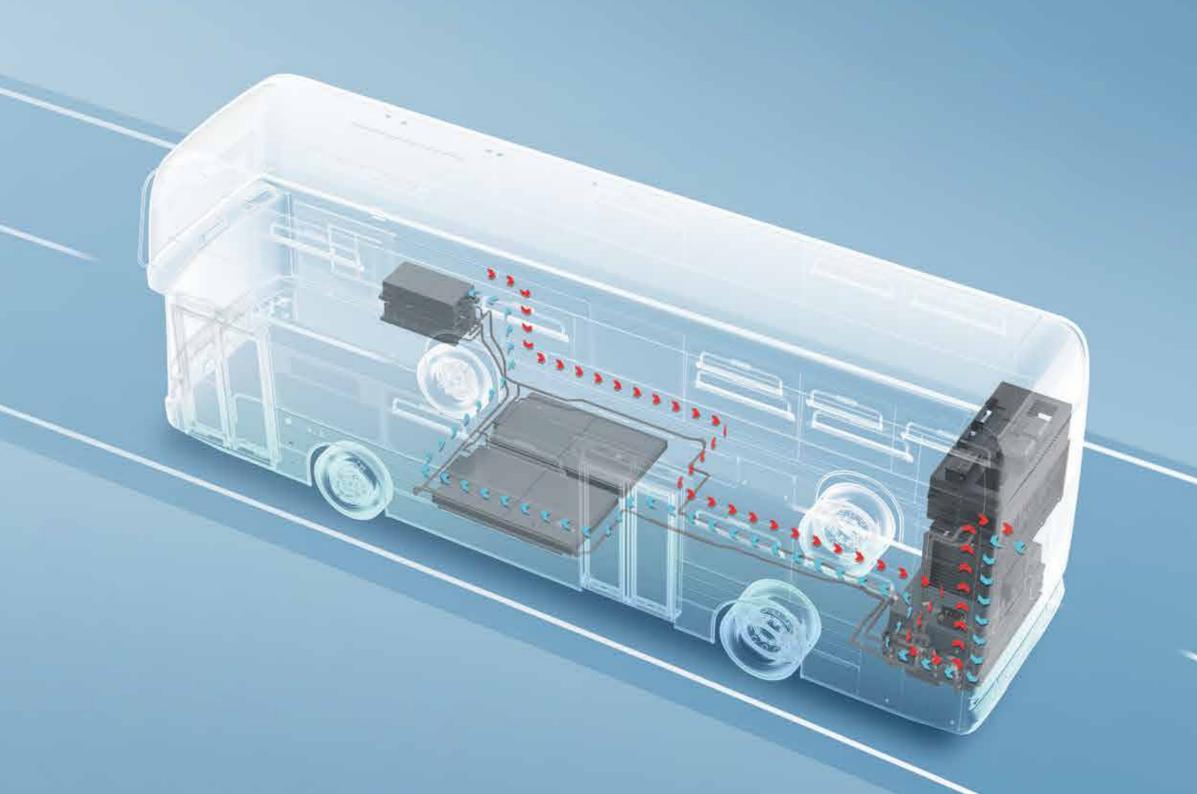
### **Integrated Thermal Management System**

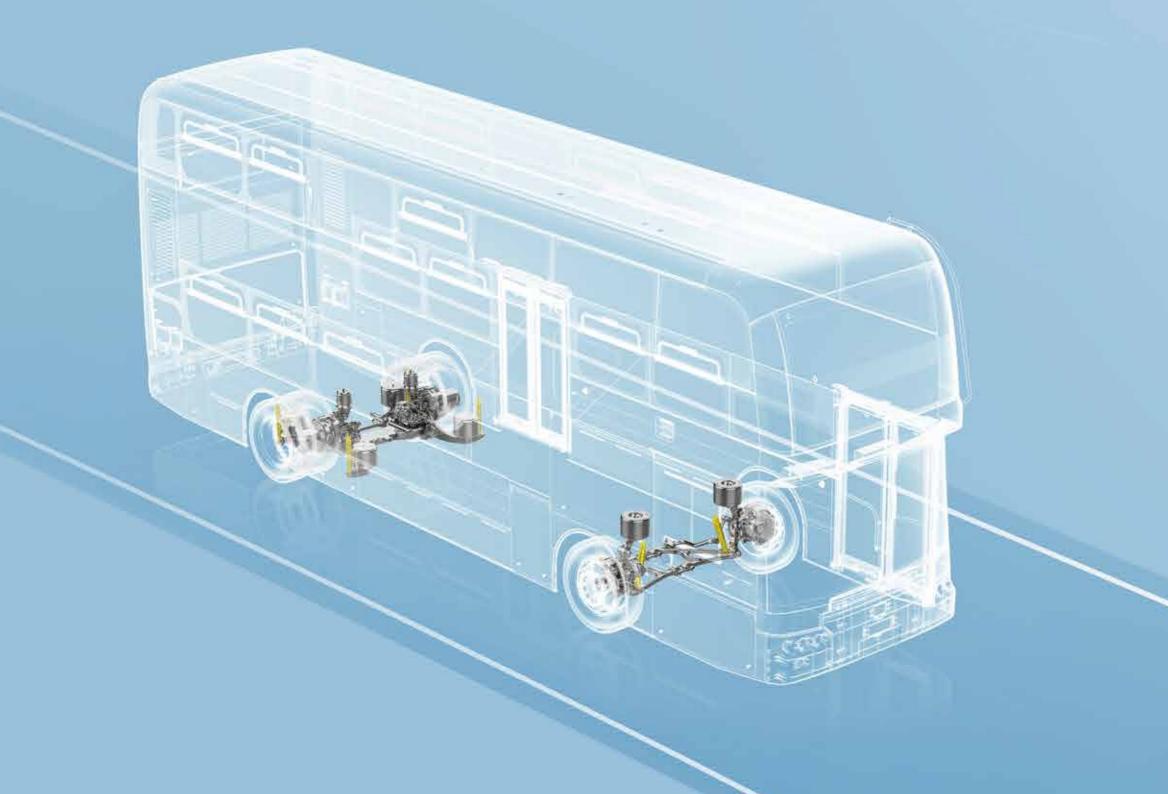
The BYD BD11 features an Integrated Thermal Management System incorporating various components for optimal energy utilisation.

This system comprises integrated drive and battery cooling.

By effectively managing thermal energy, the BYD BD11 energy consumption is reduced by 10%~50%, contributing to extended range and reduced operating cost.

The new integrated HVAC system fully meets TfL's latest regulations.





#### **BYD Active Suspension Control System**

Avaliable with the optional Active Suspension Control System, the BYD BD11 sets a new standard for ride quality. The electronically controlled CDC shock absorbers provide lower damping, resulting in improved ride comfort.

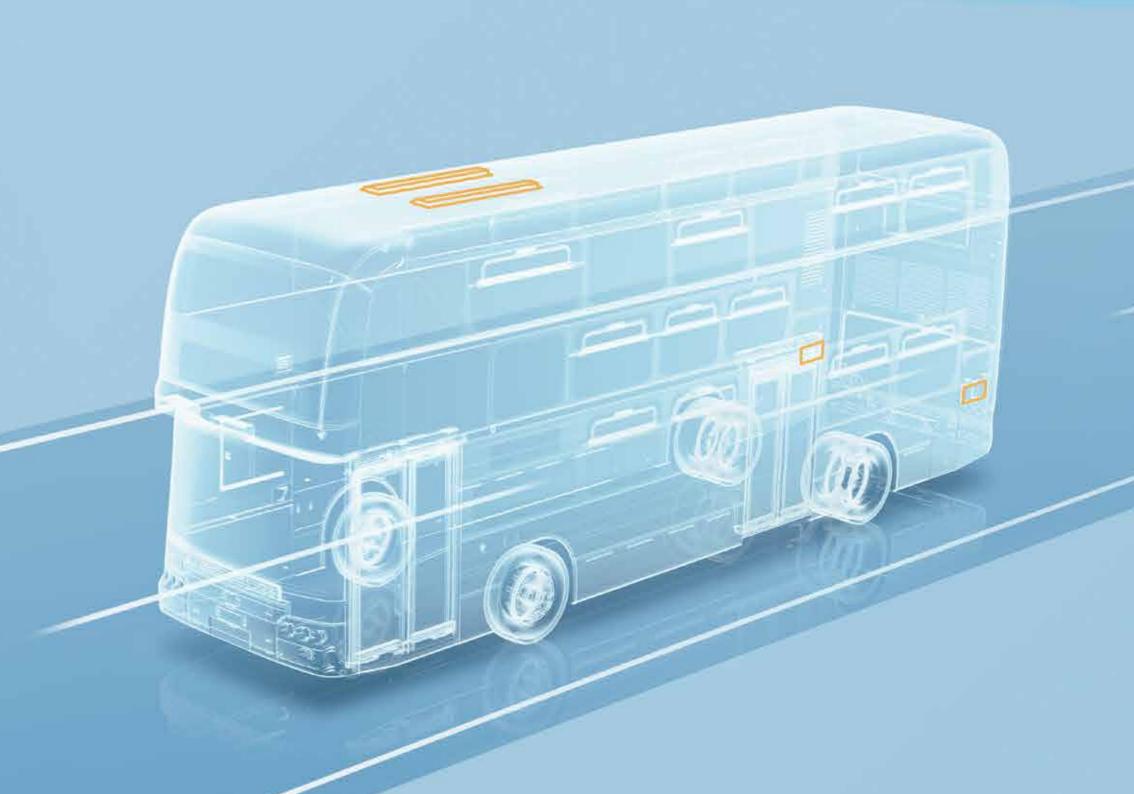
The suspension can be adjusted in real-time based on the vehicle's motion status, allowing the driver to better control the vehicle while enhancing both safety and passenger satisfaction.

# Flexible and powerful charging solutions

The BYD BD11 electric bus provides flexible and diverse charging options with various charging positions (left rear, right rear and top).

The charging power options are also impressive with a maximum charging power of 500 kW with the use of pantograph.

Rapid charging options mean that the BYD BD11 can conveniently be charged in the shortest time from 0% to 100% in just 2 hours, minimising downtime and maximising productivity for bus operators.





# **OTA Fleetlink upgrade**

The BYD BD11 is equipped with an OTA Fleetlink upgrade feature. This technology enables Over-The-Air updates and maintenance, eliminating the need for physical visits to service centres and reducing downtime.

Fleet operators can remotely access and upgrade the bus systems, ensuring that the BYD BD11 remains up-to-date with the latest software enhancements and optimisations.





#### **Basic parameters**

● Standard ○ Optional		TfL	Provincial
Vehicle length	10,900 mm	•	•
Vehicle width	2,550 mm	•	•
Vehicle height	4,300 mm	•	•
Wheelbase	5,440 mm	•	•
Front and rear overhang	2,830/2,630 mm	•	•
Angle of approach/departure	7°/7°	•	•
Body type	Low Floor	•	•
Max G.V.W	19.5 t	•	•
Tyre size	275/70R22.5	•	•
Passenger numbers	Up to 90 est.	0	0

#### Chassis

Battery model	BYD LFP Blade Battery	•	•
Battery capacity	457/532 kWh	0	0
Motor model	BYD motor, 150 kW×2	•	•
Motor type	Hairpin motor	•	•

• Standard ○ Optional		TfL	Provincial
Controller	BYD SIC (Silicon carbide) 6 in 1 controller	•	•
Battery management system	Integrated with HVAC	•	•
Front axle	ZF independent suspension	•	•
Drive axle	BYD axle with integrated BYD hairpin motors	•	•
Suspension system	ECAS (Electronic-Controlled Air Suspension) with kneeling function and PCV (Premium Comfort Valve) shock absorber	•	•
	ESAC (Electronic shock absorber control) active suspension with kneeling function and CDC (Continuous damping control) shock absorber	0	0
Steering system	Electric hydraulic power steering (EHPS)	•	•
Braking system	EBS (Electronic braking system)+ASR(Acceleration Slip Regulation)	•	•
	ESC (Electronic stability control system)	•	•
	AEBS (Advanced emergency braking sytem)	•	0

#### **Body**

● Standard ○ Optional		TfL	Provincial
Body frame	BYD IV aluminum body and composite material (Roof)	•	•
Exterior rearview mirror	Digital exterior rearview mirror	•	•
Wheelchair ramp	Electric/manual	•	•
Roof window	2 pcs	•	•
Fleet management system	Fleetlink *	•	•

<sup>\*</sup>Use of Fleetlink telematics requires a paid subscription

#### Safety certification

R155/R156 (Cyberprotection certification)	•	•
Advanced emergency braking sytem (AEBS)	•	0
Driver drowsiness and attention warning (DDAW)	0	0
Blind spot monitoring (BSM)	•	0
Forward collision warning (FCW)	•	0
Intelligent speed assistance (ISA)	•	0
Alcolock	0	0

#### **Charging concept**

● Standard ○ Optional		TfL	Provincial
Charging system	Plug charging (CCS)	•	•
	Pantograph	0	0