



Three-Door Double-Decker Electric Bus

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Safe, Reliable and Sustainable

ST Engineering's Three-Door Double-Decker Electric Bus redefines urban mobility with its commuter-centric design, prioritising safety, reliability, and sustainability. Co-developed with CRRC, the electric bus features two staircases and three doors, providing enhanced accessibility, comfort and convenience. It is engineered for swift boarding and alighting, significantly reducing dwell time at bus stops, and improving the overall travel experience for commuters.

With a proven track record in deploying innovative bus fleet solutions for transport agencies and bus fleet operators, we have the capability and expertise to deliver full-featured electric buses and customise them to meet the unique needs of different cities.

Enhancing Safety for Driver and Passengers

AGIL® DriveSafe+

AGIL® DriveSafe+ is an innovative vision-based detection system featuring wide-angle field-of-view cameras with advanced AI-driven video analytics. It leverages machine learning to continuously improve its detection algorithm, accurately identifying and differentiating between vulnerable road users (VRUs) and vehicles to assist drivers and improve road safety.

Key features

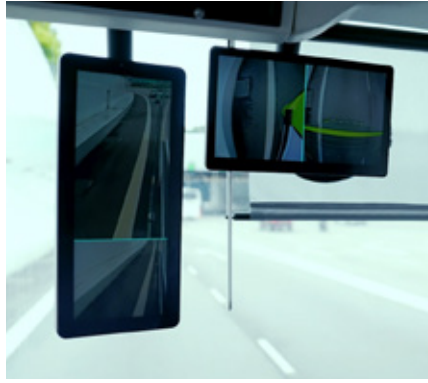
- Forward Collision Detection
- Time-to-Collision Monitoring
- Lane Departure Detection
- Pedestrian Collision Detection
- Blind Spot Detection and Warning of VRUs and Vehicles





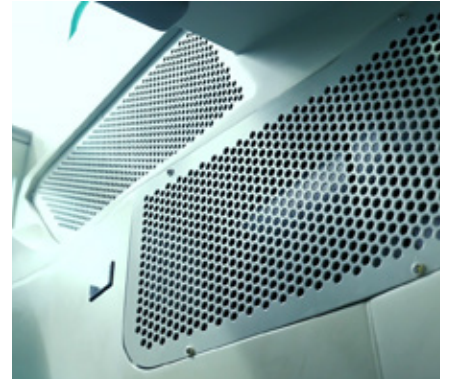
Driver Anti-Fatigue System

Harnessing machine vision and AI with real-time camera feeds, the Driver Anti-Fatigue System detects signs of tiredness and abnormal driving behaviour, and sends alert to the driver to avoid road incidents.



Camera Mirror System

The Camera Mirror System provides enhanced all-weather visibility, even in challenging conditions such as rain, fog, or at night, delivering greater clarity and situational awareness for drivers while ensuring safer driving.



UVC LED Air Disinfection System

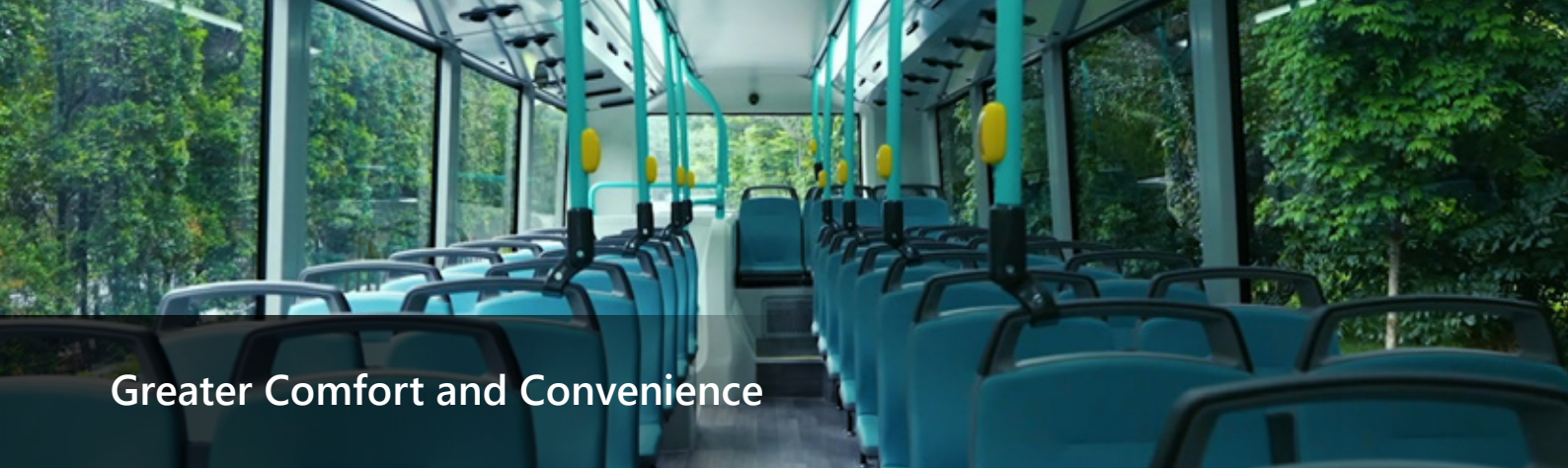
Prioritising the health and well-being of passengers and the driver, the UVC LED Air Disinfection System is integrated with the air-conditioning inlet vent to ensure clean air circulation in the bus by eliminating 99.9% of airborne viruses, providing peace of mind for travelling on mass transport.

Reducing Maintenance Cost

Automatic Water Drainage System

Experience fewer maintenance concerns with our Automatic Water Drainage System that prevents moisture from entering the bus compressor. This reduces rusting and maintenance cost while prolonging the vehicle's lifespan.





Greater Comfort and Convenience



Spacious Interior with Charging Convenience

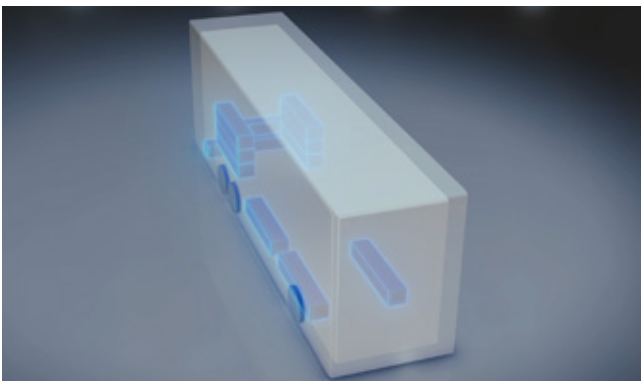
The electric bus is designed to optimise comfort and spaciousness while its seats are positioned to deliver panoramic views for commuters. It offers easily accessible USB charging ports and wireless charging points that enable passengers to plug-in on the go.



Automatic Boarding Ramp

The Automatic Boarding Ramp improves accessibility for passengers using wheelchairs, offering a seamless boarding and alighting experience. Unlike conventional manually-operated ramps, it is easy to operate and reduces strain on the bus captain.

Sustainability at Its Core



CATL Next-Gen LFP Batteries

Powered by next-generation LFP batteries with a high energy capacity of 528kWh, the electric bus delivers an improved range of up to 280km on a full charge. This optimises mileage while minimising battery space, offering an eco-friendly transport with lower carbon emissions and reduced environmental impact.



Solar Roof Panels

The electric bus can be equipped with roof-mounted solar panels that recover up to 4kW of energy. This reduces overall power consumption and load on the engine, providing a more energy-efficient and sustainable transport for urban commutes.



Technical Specifications

BASIC PARAMETER

Length*Width*Height (mm)	12000*2550*4390
Wheel Base (mm)	5220+1550
Laden Weight (kg)	24420
Axle Maximum Laden Load (Front/Centre/Rear) (kg)	7460/6560/10400
Passenger Capacity	Seating: 63; Standing: 57. Total: 120
Power Battery	528kWh Lithium Iron Phosphate, CATL
Cruising Range	260km ^① / up to 310km ^②
Maximum Allowable Charger Power	175kW (single gun), 280kW (dual gun)

KEY COMPONENT CONFIGURATION

Drive Motor	CRRC permanent magnet synchronous motor (PMSM), peak power 350kW, peak torque 3500Nm, maximum speed 3300rpm, liquid cooling
Steering Booster Pump	Electric steering booster pump
Air Compressor	Electric air compressor
Cooling System	Intelligent cooling system
Front Axle	ZF RL82A rigid steering axle
Middle Axle	ZF RL82A tag rigid axle
Rear Axle	ZF AV133
ECAS	With kneeling function
Steering	Recirculating ball type hydraulic power steering machine
Tyre	275/70R22.5
Bus Body	Aluminium alloy body
Multiple Access Points	3 doors, 2 staircases
Exterior Mirror	Camera mirror system
Roof Fitting	Solar panel
Interior Floor	Fire retardant, anti-rot treated structural plywood
Multi-Functional Area	2 Wheelchair space, automatic boarding ramp
Floor Covering	Fire retardant, anti-slip material
Advanced Driver Assistance Systems	AGIL DriveSafe+: Forward Collision Detection, Time-to-Collision Monitoring, Lane Departure Detection, Pedestrian Collision Detection, Blind Spot Detection and Warning of VRUs and Vehicles, and Driver Anti-Fatigue System

Note:

① Urban bus driving cycles.

② Equal speed cycles.

The information in this brochure is for reference only. The specifications and layout are subject to change without prior notice.

ST Engineering Mobility Services Pte Ltd
31 Corporation Road, Singapore 649825
Tel: 6660 3991 Email: mobilitysvcs@stengg.com

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