

ST Kinetics' Autonomous Bus Prototype

Connectivity

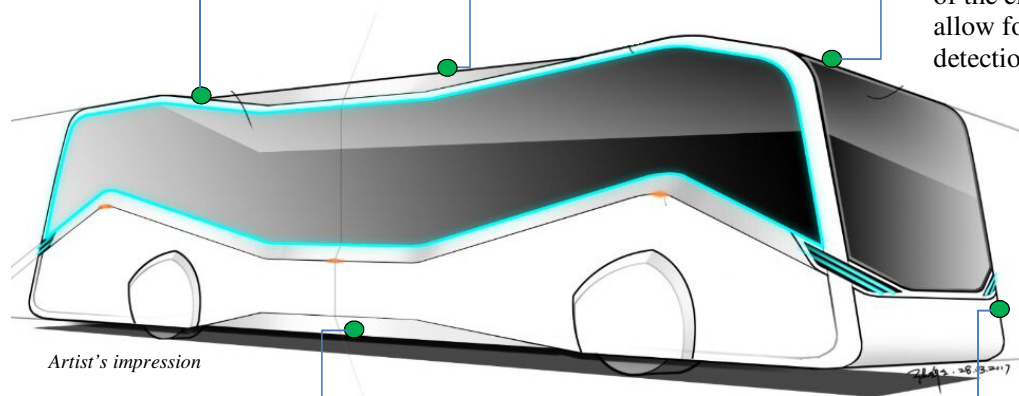
The autonomous bus will be equipped with vehicle-to-vehicle and vehicle-to-infrastructure capabilities to communicate seamlessly with other AVs and infrastructure. The bus will also have WiFi and 4G capabilities.

Precise Positioning

The bus will use a GPS system and sensors for global localisation. It will be retrofitted with sensors to scan the surroundings and determine the vehicle's position in any environment.

Perception Sensors

Perception sensors will provide 2D and 3D maps of the environment to allow for obstacle detection and avoidance.



Powered by Electricity

The autonomous electric bus will have a full aluminium body and chassis, with low-energy consumption.

Pedestrian and Vehicle Detection

Radars and Sonars will cover the area within a distance of 10m in front of the vehicle and scan the surroundings before the bus moves off. Long Range Radars are installed to detect vehicles that are up to 200m ahead.

Cameras will be used to detect obstacles and supplement perception maps with environmental analysis and classification (such as road signs, traffic lights).

Vehicle Specifications

Size	12m (length) x 2.55m (width) x 3m (height)
Carrying Capacity	Configurable Standard: 36 seated, 33 standing, 1 wheelchair
Door	3-doors configuration
Maximum Operating Speed	Up to 60km/h, depending on operating scenarios
Typical Range	30 – 50km, depending on operating scenarios