

ST Kinetics' autonomous bus prototype

Connectivity

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

Precise positioning

The bus will use a Global Positioning System. It will be fitted 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 avoid obstacle.

Vehicle Specifications

Size

12m (length)
2.55m (width)
3m (height)

Carrying capacity

36 seated,
33 standing,
1 wheelchair
(configurable)

Doors

Three

Maximum operating speed

Up to 60kmh,

Typical Range

30-50km

Artist's impression

Body and powertrain

The bus will have an all-aluminium body and chassis. It will have electric motors powered by two choices of batteries.

Pedestrian and vehicle detection

Radar 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 will detect vehicles up to 200m ahead. Cameras will be detect obstacles and supplement perception maps with environmental analysis and classification (such as road signs, traffic lights).

