

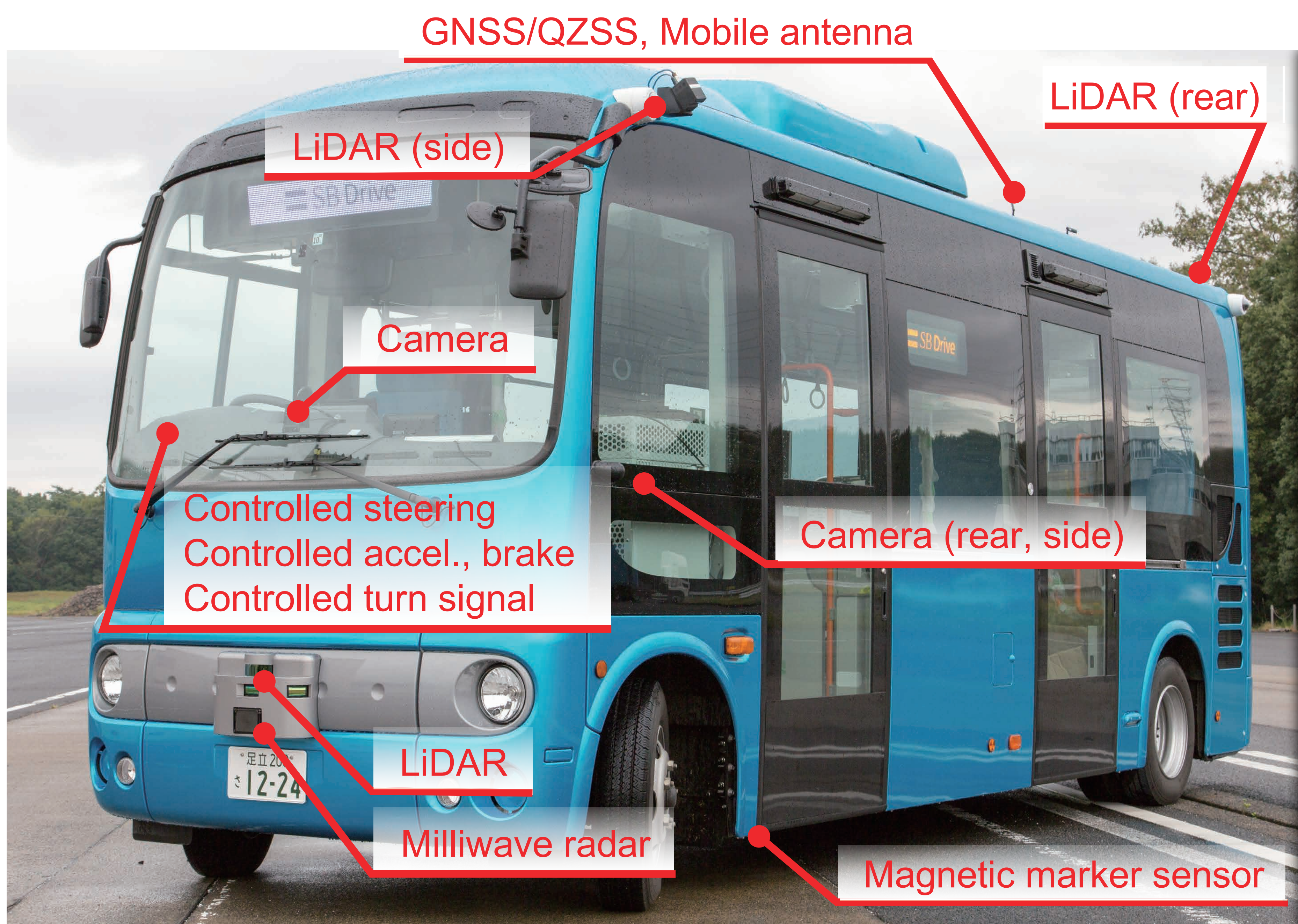
Self-Driving Bus Feasibility experiment in Okinawa pref.



Overview of Experiment

Public road experiment	Ginowan City	Ishigaki City	Nanjo City
Period	Dec. 4-13, 2017	Jun. 25 - Jul. 7, 2017	Mar. 20 - Apr.2, 2017
Distance (One way, Total)	10km, 440 km	16km, 1650 km	1.2km, 84km
Traffic	High-traffic	Normal-traffic	Low-traffic
Max. velocity	40 km/h	40 km/h	35 km/h
Total passengers	140 (approx.)	370 (approx.)	160 (approx.)

Equipment and Function



- Lane keeping control
- GNSS(GPS), QZSS
- Magnetic marker
- Velocity control
- Traffic light consideration
- ACC, PCS
- Obstacle avoidance
- Multi sensors with Deep Learning
- Digital map
- Lane change control
- Bus-stop docking control

Accuracy of Docking control

	Recognition	Accuracy
RTK-GPS	Continuous	± 10cm
Magnetic marker	Discrete	± 8cm
White line (CAM)	Continuous	± 5cm
Edge stone (LiDAR)	Continuous	± 2cm

Magnetic marker has robustness for weather, condition of edge stone or white line.

Evaluation of Override

Override	Frequency	Situation
Steering	2.3 times / 20km	Lane change in high-traffic density
Brake	4 times / 20km	<ul style="list-style-type: none"> • traffic (red) light • Right turn(for oncoming car)