

What 'smart' lamp posts can do

Lamp posts in one-north and Geylang will be turned into "smart" fixtures to collect and communicate environmental, crowd and vehicular data to government agencies, for better urban planning and management. The project could be expanded nationwide involving more than 100,000 lamp posts.

Autonomous vehicle

Real-time kinematic technologies mounted on lamp posts will provide line-of-sight connection to self-driving vehicles, to determine their precise location for navigation and to avoid collisions.

Environmental sensors

Sensors mounted on lamp posts will be able to collect environmental data, including temperature, humidity, air quality and rainfall. The data is sent to self-driving cars to improve their situational awareness of road conditions.

Personal mobility device

Camera and artificial intelligence-based video analytics systems mounted on lamp posts will be able to determine if a mobility device or bicycle is travelling at more than 15kmh on footpaths, which is illegal. The data will be captured and an alert will be sent to the relevant agency.

Facial detection

Camera and artificial intelligence-based video analytics systems mounted on lamp posts will have the ability to index faces to determine gender, race and age, as well as perform facial matching against databases.

Crowd analytics

The lamp post-mounted systems will be able to analyse crowd congregation and dispersal patterns to determine situations such as unruly crowds, train breakdowns or traffic congestion.

