SMART LAMP POST

Smart Lamp Post is designed for better urban planning, environmental management and ultimately, benefitting the public.

The key features of smart lamp post are reducing electricity consumption by adjusting the light level adaptable to the surrounding. It will collect and transmit environmental data and street video surveillance to Control Center for further analysis and enforcement.

The smart lamp post allows Control Center to communicate with the public via integrated public address system and digital signages.

It has Wi-Fi hotspot, Information Board, SOS Emergency Call Button and other facilities.

This is accomplished by using environmental sensors, high resolution cameras, video content analysis, GPS navigation unit, communication devices, network system and deep learning A.I.

Environment Data Collection:
- Temperature/Humidity sensor
- CO2/ Pollutants sensor
- Smoke Detector
- Rainfall sensor
- Noise sensor
- PM2.5 sensor

Video monitoring:
- Pan tilt & zoom camera (optional)
- VCA features to list down
  - Illegal parking or unattended baggage
  - Loitering
  - Intruder virtual trip wire
  - Facial recognition (future implementation)

Emergency Button:
- Field contact to control center

Public Address:
- Emergency Announcement
- Live/recorded music broadcast

Intelligent Lighting:
- Auto-adjust light level based on outside enviroment
- Remote override by Control Center
- Schedule Lighting

Wifi Hotspot:
- Public Wi-Fi connection hub

Digital Signage
- Tourist Information
- Customized Content
- Advertisement
- Political News
- Live Streaming

Solar Energy:
- Applicable everywhere, useful for remote location with no access of electricity
- Minimize impact on environment and operation cost

SMART LAMP POST

PATENT PENDING

Benefit of converting traditional lamp post into future smart lamp post:

• Minimise energy consumption by automatically adjusting lighting level according to environmental conditions

• Better master planning due to analytics done using environmental information collected via different sensors

• Better road safety and security via vehicle speed detection, license plate recognition and other traffic enforcement

• Better road planning due to statistics collected on traffic intensity and road usage.

• Reduced crime rate as CCTV and emergency call buttons act as deterrence.

• On-board GPS provide precise timing and geographical coordinates for faster response to emergencies

• More effective investigations can be done with high definition video recording and analytics such as facial recognition.

• Effective broadcasting of messages via public address system and digital signage.

• Modular design with a wide range of options to cater to different needs and different locations

Sensor Data Collection

Environmental Management

Transport Statistic

Urban Planning

Street Surveillance

Traffic Enforcement