IoT Suite of Solutions

ST Engineering’s suite of IoT solutions help smart cities to manage multiple smart city applications on a common platform. Its open architecture design leverages best of breed technologies and standards to facilitate data exchange and analytics, while generating valuable insights to improve quality of city services and enhance operational efficiency. Our solutions include

- IoT Platform
- Smart Street Lighting
- Smart Lamp Post
- Smart Lift Monitoring
- Smart Waste Management

Global Deployment

We have a proven track record in deploying more than 15 million wireless sensors and smart solutions that transform cities worldwide. Our global footprint covers various countries such as the UK, the US, Canada, France, New Zealand, Brazil and India.

Our solutions enhance city planning, improve service delivery, optimise efficiency and reduce operating costs essential for driving sustainable and liveable smart cities.
With massive data generated from various sources and the use of different standalone IoT solutions across cities worldwide, having a unified and secure smart city dashboard to view, manage, analyse such data to provide useful insights for seamless city management and planning is essential for maintaining a sustainable and liveable city.

ST Engineering’s Smart City Dashboard integrates various IoT vertical solutions to provide a common overarching view of a city’s operations and improve its services for residents. It leverages best of breed IoT technologies and communications solutions on a single platform to provide greater benefits and enhanced efficiency to municipalities, city and estate management.

The Smart City Dashboard focuses on achieving business and operational objectives by aggregating and enhancing data from multiple IoT solutions, sensors and devices to provide city-level visualisation and valuable insights that improve operation efficiency and optimise city management and planning.

### Key Challenges

The Smart City Dashboard is designed to overcome the following challenges of IoT deployment:

- **Management of multiple IoT applications**
  - Each IoT vertical solution has its own standalone management system

- **Lack of unified view**
  - Difficult to aggregate data from different IoT use cases and verticals into a common dashboard
  - Complexity in presenting and visualising IoT data at city level to provide operational and management insights

- **End-to-end security**
  - Ensure reliable protection of data, networks and applications

### Key Benefits

- **Seamless operation and reduce cost of ownership**
  - Unified and centralised Smart City Dashboard

- **Integration of various IoT vertical solutions**

- **Multi-tenancy**
  - Independent operations and control with data isolation and protection
  - Enable each application to subscribe to different IoT use cases and data

- **Highly scalable**
  - Multi-tiered microservice architecture
  - Enables users to manage deployment of any size and scale based on their growth needs

- **End-to-end secure platform**
  - Protect critical business information

- **Customisation**
  - Open and extensible to adapt to changing needs

- **Flexible deployment model**
  - Can be deployed on premise or cloud (independent of specific cloud hosting technology)
  - Full management of cloud service hosted on different cloud environments (such as Amazon Web Services (AWS) and Microsoft Azure) without heavy investment on the infrastructure

### Key Features

- **Unified City View**
  - Integrate the following IoT solutions
    - Smart Street Lighting
    - Surveillance Camera
    - Smart Environment Monitoring
    - Smart Waste Management
    - Smart Lift Monitoring

- **Smart City KPI*”**
  - Real-time statistics
  - Performance measurement

- **Reports**
  - Historical data and trend analysis
  - Cross domain correlation

- **Operational Insights**
  - Asset management
  - Status monitoring
  - Fault reporting

- **Software Deployment Options**
  - Cloud-based
  - On-premise

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* Key Performance Indicators
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**Scalable, Multi-tenant and Unified**

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