





#### Overview

A smart city is a vision that integrates information and communication technology with Internet of Things (IoT) technology to better manage a city's assets to improve the life of citizen's within the city. IoT technology allows city officials to monitor what is happening with city infrastructure and allows them to interact with the infrastructure to achieve a variety of benefits such as enhancing the quality of services, and reducing costs, consumption, and inefficiencies.

# **Applications**

Smart City applications are numerous and varied, and cover applications such as Energy Distribution, Lighting, Water Supply, Transportation Systems, Waste Management, Facilities Management, just to name a few. Through the use of sensors integrated with real-time monitoring systems, data is collected, processed and analyzed. Information and knowledge gathered, combined with corrective and supporting actions (sometimes automated) are the key to achieving the benefits that are hoped to be realized.

# The Need for Security

But the interconnectivity of people, devices and organizations also opens up new vulnerabilities — unauthorized users and hackers can get in, tamper with the collected data, access personal information, and do harm through control of equipment and processes. Without security, data collected cannot be trusted, the citizen's privacy cannot be guaranteed, and automated capabilities are not possible. Fortunately, security technologies exist and can be applied to alleviate these concerns.

At ESCRYPT, we take a holistic approach to security to ensure security and trust is established and maintained throughout the application life cycle. In doing so, we make embedded systems and IoT applications found in Smart Cities applications safe and secure. ESCRYPT has specialized in the development and implementation of large scale security solutions that can protect millions of devices and a wide range of different Smart City services.



### ESCRYPT's Holistic Approach to Securing Smart Cities



#### **Our Process**

At ESCRYPT, we take a holistic approach to security to ensure security and trust is established and maintained throughout the application life cycle.

We Design In Security from the beginning with our application security consulting and design professional services. We Enable Security with our embedded security software toolkits and products used in IoT devices and sensors. And We Manage Security with our security solutions that incorporate cloud based [back end] security infrastructure for key and certificate management.

## **Broad Security Product Portfolio**

ESCRYPT offers a wide range of security consulting services and a broad product portfolio. Products include embedded security and cryptographic toolkits, products that secure communications links, technologies to monitor and detect intrusion and unauthorized behaviours, backend security infrastructure to manage device security credentials, and device provisioning products and solutions to ensure security is enabled at the time of IoT device manufacturing.

ESCRYPT security engineers are available to help in designing secure Smart City applications and installations, and we can help with security assessments of third party vendor solutions. Let ESCRYPT be your trusted security advisor for all your Smart City applications.

