SmartGreen Deploys Silicon Labs Zigbee Module to Deliver Commercial Lighting Energy Savings to its Customers

The Challenge
To develop end-to-end integrated IoT commercial automated lighting solutions that cities can implement to meet new energy efficiency and climate regulatory standards.

The Solution
Using the MGM13P Mighty Gecko Zigbee Module to seamlessly integrate reliable high performance, low power, and built-in security capabilities to smart lighting solutions.

The Result
Creating commercial lighting solutions that include the hardware, gateway, and endpoint for streetlight projects, all with cost-effective and scalable performance abilities.

SmartGreen is a Brazilian IoT company focused on sustainable smart lighting and smart metering automation solutions. Headquartered near Sao Paulo, SmartGreen works closely with cities to build end-to-end IoT integrated commercial automated lighting solutions. By the end of 2020, the company will have deployed more than 200,000 commercial lighting systems across municipal streets in Brazil. SmartGreen’s customers include EDP Brasil, Citelum and Quantum Engenharia. Since the company’s inception in 2012, it has focused on offering an integrated IoT solution to customers encompassing hardware, communications, gateways, the processing layer, and the software and apps needed to manage a device.

SmartGreen’s commercial lighting solutions operate via a mesh network using Zigbee 2.4GHz. The company’s primary smart light product is the SGIP7, which replaces the photocell and gives the luminary the intelligence it needs to be automated. SmartGreen’s solution includes the hardware, gateway, and endpoint for street light projects as well as a SaaS package, including software licenses, upgrades, cloud capabilities, and ongoing technical support.
Why Silicon Labs:
SmartGreen has been using Silicon Labs’ first-generation Zigbee module and is currently upgrading to the MGM13P Mighty Gecko Zigbee Module. SmartGreen has tested numerous protocols in the past, but developers ran into performance and cost issues. The Zigbee protocol and architecture, along with Silicon Labs’ Bluetooth mesh module, works exceptionally well for SmartGreen’s commercial lighting applications because of the protocol’s reliable high performance, low power, and built-in security capabilities.

How SmartGreen’s Commercial Lighting Solution Makes the World Better Place:
Many of SmartGreen’s customers are using our commercial lighting solutions to meet new energy efficiency and climate regulatory issues. City managers are excited about the energy savings they gain from automated commercial lighting solutions and the solution’s ability to reduce the workload for fuel operations teams. Many city managers are also interested in using the product’s platform to automate city infrastructure to improve overall operations of their city. Because the SmartGreen technology platform is already built into many Brazilian city infrastructures, SmartGreen is evolving into a multi-service network for cities beyond smart lighting. The company’s municipal customers want to explore other automated services on the platform, such as using environmental, traffic, and utility sensors to help them operate their cities more sustainably and efficiently. Silicon Labs’ Mighty Gecko Module solution is helping SmartGreen make this extension offering possible because of its cost-effective performance abilities.

“The Zigbee mesh network combined with Silicon Labs’ wireless technology enables the sensors and devices to communicate with each other without the gateway, so even if the network goes down our devices can continue to work and communicate with other sensors and devices.”

- Daniel Russi Netto, Co-Founder and Commercial Director, SmartGreen

Want to learn more about secure, scalable and interoperable wireless connectivity for commercial lighting?

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