Largest Sensor-Based Smart Lighting Project in India

Jaipur SMART CITY

Jaipur becomes a Smarter & Safer City
with Tvilight's Intelligent Lighting Solution

Seamless Integration with Cisco Kinetic

| Jaipur ▼ | Dashboard | Map View | Policies | Events | Reports | ⚙ |

Environment	Water distribution	Building plan approvals	Mobility	Traffic
Health: 73% – Fair *All systems running optimally*	Supplied – 89% *Meeting recommendations*	Health: 57% – Poor *Total revenue ₹ 82,88,01,638.89*	Health Unavailable *Gathering Data...*	Health: 75% – Average *All systems running optimally*

Parking	Lighting	Solid Waste Management	Tax
Health Unavailable *No Active Parking Systems!*	Health: 95% – Excellent *191 of 199 lights active*	Health: 65% – Fair *Fair fleet usage rate*	Collection – 29% *Poor collection rate*

Open API-Based Smart Street Lighting

Tvilight provided Jaipur with its innovative intelligent lighting solution, which includes award-winning motion sensors and wireless controllers capable of adjusting the brightness levels of streetlights based on real-time human presence. Tvilight's smart street lighting works on **Open API**; hence, the integration with third-party smart city management software (**Cisco Kinetic**) and luminaries (**Bajaj Electricals**) was also easy. Using the collaborative solution, Jaipur can now collect valuable data and create lighting profiles that match the unique illumination requirements of a particular location in the city.

Revolutionary smart street light sensors and versatile lighting controllers from Tvilight enable the 'Pink City' Jaipur (India) to reduce energy consumption, lower maintenance costs, improve safety and quality of life of the citizens, and take a leap towards becoming one of the forefront smart cities in the country.

"**Jaipur** is a historical city that attracts tens of millions of tourists annually from all over the world. We aim at becoming a Digital City with greater connectivity and information access for the citizens as well as the tourists. With intelligent lighting solution, this vision became a reality. Our city is benefiting in every aspect – from safety and security, to easy access to information, to overall improvement of our image and a stepping into the "Smart City" arena."

Shikhar Agrawal, Government of Rajasthan

Benefits

- 72% energy savings and thereby reduced costs, CO2 emissions and light pollution
- Better maintenance and accountability, as it doesn't require around the clock manual intervention or night patrols
- User friendly web-application helps to remotely monitor, manage and control entire public lighting infrastructure
- Open API allow integration with other Smart City applications

- Automatic reports and diagnosis help tracking luminaire health and performance, thus saving time and achieving faster services
- Better electrical infrastructure extends asset lifetime
- Improved public safety perception as streetlights illuminate automatically to a higher level upon detection of human presence
- Enhances city aesthetics through better lighting quality

Challenge

A city almost 300 years old with rich cultural heritage, Jaipur, also known as the 'Pink City,' has become one of the top tourist destinations in recent years, attracting over 40 million domestic and foreign visitors each year. With the massive number of visitors, the city administration was under pressure to improve the quality of services it provided to both the visitors and residents. The city wanted to not only increase the quality of public services, but also improve the safety of residents and visitors alike. In addition, Jaipur wanted to realize all these by being cost-effective and manageable.

Solution

While the city desired to implement a number of smart city solutions, public lighting was a priority. Streetlights are the largest consumer of electricity. In addition, they are also major contributors to CO2 emissions and light pollution. On the flip side, street lights illuminate the dark pathways at night and offer a sense of security to the occupants. For that reason, Jaipur wanted a smart lighting solution that could save energy and address environmental challenges, all while keeping citizen safety and contentment at the center.

Project Details

Location	Jaipur, India
Client	Jaipur Development Authority (JDA)
Application Areas	Main and Secondary roads
Products	Tvilight's CitySense and SkyLite
Project Partners	Cisco, Bajaj Electricals, HFCL