Smart Street Lights for Smarter Cities
CityManager CMS
v11.04.2023
Who are we?

Specialist in **Smart Outdoor Lighting**

We enable cities to take full control of their Lighting Infrastructure based on Open Standards
Global presence: Deployment in 800+ projects

Monitored by CityManager and supported by our Service Desk

Selected Projects

- Dortmund (DE) 30,000 smart streetlights
- Düren (DE) 5,000 smart streetlights
- Dutch Railways (NL) 10,250 smart streetlights
- Island of Texel (NL) 3,420 smart streetlights
- Helmond (NL) 8,500 smart streetlights
- Seoul (KR) 2,500 smart streetlights
- Busan (KR) 1,500 smart streetlights
- Bangladesh 4,300 smart streetlights
Single Platform to Manage RF Mesh and IoT Networks
CityManager Central Management System

- **Secure platform**, accessible from anywhere, at any time
- **Monitor, manage** and **control** citywide streetlights with intuitive interface
- **Open API** and TALQ compliance ensure vendor-neutral interoperability
Open, Secure & Interoperable

Vendor neutral system

- Open API and TALQ compliance ensure easy integration with third-party applications
- Successful integration examples:
  - Cisco Kinetics
  - SixData luxData.light
  - Thorn UrbaSens
  - Montad Moon
  - Dynniq ImCity
  - Osram Lumldent
  - Bee Smart City
  - Siemens / Atos
Manage Streetlights Remotely

Intuitive web interface renders total control

- Secure cloud hosted platform, accessible from any web browser, from anywhere, at any time
- Easy-to-understand and easy-to-use application interface help manage streetlights effortlessly
- ISO and NEN certified infrastructure
Control Citywide Lighting

Fine-tune lighting as per the demand

- Create custom groups or manage individual streetlights
- Adjust lighting requirements based on:
  - Profiles
  - Specific days
  - Certain events
  - AstroClock
  - Ambient light sensor
  - Human movement (motion sensing)
Fine-tune for **Sustainability and Safety**

High level of control over streetlights

- Reduce energy consumption and limit CO2 emissions and light pollution with dimming schedules and motion sensor parameters
- Adapt lighting with ease to balance sustainability and citizens’ comfort and safety
Adjust Street Light Colours

Create the right ambience

- Choose from a broad spectrum of colors or any shade of white to find the right tone (RGBW)
- Adjust colours based on:
  - Profiles
  - Specific days
  - Certain events
  - Human movement (motion sensing)

* Currently works with OpenSky Zhaga IoT Controllers only
Citywide Maintenance Overview

Identify alerts/alarms at a city-level

- Know the precise location where the maintenance operator should act.
- Reduce truck rolls and subsequent expenses.
Monitor Faults, React Quickly

Achieve proactive maintenance

- Get near-real time information of luminaire
- Automatic alerts / notifications when faults / outages arise
- Reduce truck roll by knowing the exact reason of failure
Daily Reports on Lighting Infrastructure’s Health

Keep citywide lighting up-to-date

- Receive automated emails containing vital information:
  - Fault light report
  - Daily savings report
  - Daily consumption report
- Helps plan maintenance
Smart Street Lighting Analytics

Gain insights to optimize lighting

- Track lighting performance, status, energy consumption, savings of each luminaire
- Heatmap to identify busy areas / spots
- Insightful graphical data helps make actionable plan to meet sustainability goals
Advanced Energy Monitoring

Detailed information about luminaire health through D4i standard

- Luminaire / controller operating hours
- Power usage for specific day, week, month or year
- Driver temperature
- Input voltage
- Input power
- Input current
- Power factor
Visualise Entire City’s Lighting

Beautiful visualization of Citywide Lighting

- See when precisely the citywide streetlights turn on, adjust brightness and turn off between sunrise and sunset
- Visualize lighting for the future days / events
Listen to your City’s Heartbeats

Valuable heatmap
- Measure people’s movement during different hours at night
- Identify areas / spots that are more popular
- Spot trends and patterns to optimize street lighting levels
View Network Formation

See how devices are connected to each other

- Helps optimize or troubleshoot coverage issues
Detailed historical data

- Address existing faults by tracking similar issues that had occurred in the past
- View detailed log on CityManager
Create a Safe Circle of Light for Citizens

Set neighbour lighting triggers with ease

- On a map view, locate and set the corresponding streetlights that will trigger upon human detection
- Helps create a safe-circle-of-light, boosting road-users safety perception
Different Map Views for Better Perception

Understand your lighting terrain

- Map view (with terrain option)
- Satellite view
  - Tile map
  - 360° Street view (if available)
Welcoming Login

Refreshing login screen that inspires

- Dynamic login screen
- Customization option available
Right Control with the Right Person

Simple user rights management

- Decide who can access CityManager
- Defined the level of permission:
  - Read only access
  - Admin access
  - Custom access:
    - Device management
    - Lighting profile creation
    - Analytics only
Rules Engine to Interoperate City Infrastructure

Customization on demand

- We will help you build customized logics, conditions and events to generate alerts, alarms or trigger actions
- Imagine streetlights turning bright when fog hits your town or when visibility drops significantly
- Inter-connect CCTV / Traffic Lights to Streetlights with API
New Features with Regular Updates

Addressing your needs is our priority

- Features and functions are introduced regularly based on our customers feedback and request
CityManager with your own Branding

Version to reflect your own brand

- For premium partners and customers, we can customize and help with your own branding
Manage Group Lighting

Dedicated application for Group Control

- Manage citywide Feeder Pillars and Control Cabinets through our dedicated software application
- Advance switching control, real-time monitoring and alarm management
Mobile Apps to Support Commissioning & Maintenance

Scan & Go for easy commissioning

- Makes device commissioning easier / hassle-free for the crew on the field
- Available for both Android and iOS platforms
- Dedicated Apps (HiLight, Light Switch) for emergency and maintenance support
We are Here to Support You

24x7 Service Desk

- You have your own portal where you can avail:
  - Information request
  - Demo project request
  - Technical assistance
  - CMS feature request
  - Technical suggestion
  - Replacement / return request
  - Knowledge repository

Service Desk
Features to improve day-to-day operations…

Intuitive User Interface
The entire system is carefully designed so that users can easily understand and use it. Multilingual option is also available.

Perfect Controllability
Whether Mesh devices or IoT devices or both, the platform offers seamless controllability to the users.

Map-based Visualisation
Each connected luminaire is represented on a graphical interface on Google Maps, coordinated with GPS.
Features to improve day-to-day operations...

Secure & Reliable
Advanced VPN and data encryption ensure that the system meets international standards. ISO and NEN certifications for system servers.

Accurate & Real-Time Data
The platform provides automatic analysis and evaluation of lighting data including status reporting and failure alerts.

Automatic Failure Reporting
The platform can identify several lighting-related faults and automatically send failure reports to the concerned personnel.
Client Testimonials

Jan Wiesemann, Trilux

"Individual light management and control provide unprecedented flexibility. Performance of all the streetlights is clearly visible in the light management system. Smart monitoring provides an excellent degree of transparency for installers and operators. This is what future smart light looks like today!"

Meinolf Pflug, Dortmund Civil Engineering Office

“The system works very well and has the desired LMS functions. This includes the lamp status, fault analysis and reporting (24/7), monitoring of the energy consumption data. Individual light profiles can be checked and adjusted at any time online. I wholeheartedly recommend this lighting system to other cities.”
Like it.

Why not give it a try?
Want to learn more?

Need a quick demo?

Contact us at: info@tvilight.com
We look forward to working with you!