

## LEOLink ILS

Intelligent Lighting System for Tomorrow's Smart and Sustainable Cities



Transform your city's traditional streetlighting and off roadway lighting infrastructure into a responsive, AI-driven network with real-time control, predictive maintenance, and sustainable scalability.

# Intelligently Illuminate City Streets and Roadways

#### **Smart. Scalable. Effortless.**

LEOLink ILS is the next evolution in street lighting, integrating AI and IoT to transform a city's traditional outdoor lighting infrastructure into a smart, adaptive network. It empowers municipalities and utilities with real-time control, predictive maintenance, and rapid scalability, all with unmatched simplicity.

Integrating LEOTEK's AI-driven centralized management platform (LEOLink RenAI) with intelligent streetlight controllers, LEOLink ILS provides 24x7 visibility into the status and performance of streetlights enabling efficient energy use, real-time fault detection, and predictive maintenance across city-wide lighting networks. Easy "plug-and-play" deployment and scalability support users in achieving operational excellence, public safety, and long-term sustainability. With LEOLink ILS, cities are creating the backbone of a future-ready smart city.

#### **KEY FUNCTIONS**

#### **Centralized, Remote Management**

Gain complete control of your city's smart lighting infrastructure from a single, intuitive platform.

#### **AI-Powered Predictive Maintenance**

Detect and address faults before they occur, minimizing downtime and maintenance costs.

#### **Energy Efficiency & Cost Savings**

Optimize energy usage with intelligent scheduling and dimming, reducing operational expenses.

#### **Instant Response to Anomalies**

Automatically identify and respond to abnormal lighting behavior in real-time.

### Actionable Insights Through Data Visualization

Monitor asset performance and energy trends with clear, interactive dashboards.

LEOLink ILS is more than streetlighting; it's the foundation of a smarter, safer, and more sustainable city.



#### **ILS APPLICATIONS**



#### **City Roadways**

Enhance traffic and pedestrian safety with adaptive dimming, real-time fault detection, and intelligent lighting schedules that align with city dynamics and energy usage and sustainability goals.



#### **Parks & Public Squares**

Create inviting, energy-efficient spaces for community gatherings with lighting that balances visibility, comfort, and reduced light pollution.



#### **Industrial Parks**

Ensure nighttime safety and security with consistent illumination and centralized lighting control tailored to industrial needs.



#### Highway

Improve driver visibility and minimize accident risks with high-lumen output and real-time failure response that eliminates dark zones.



#### **Intersections**

Improve safety at critical roadway junctions through AI-enhanced lighting that adapts to real-time traffic and pedestrian movement.



#### **Lighting Maintenance and Repair**

Utility and city maintenance and operations teams move from reactive to proactive, identifying and resolving outages faster resulting in less down (dark) time and lower TCO

## LEOLink Controllers

#### **KEY FEATURES**



#### **Self-Monitoring & Fault Detection**

The controller continuously monitors the lighting fixture operational status, identifying power outages, lamp failures, and abnormal energy patterns for fast diagnostics and maintenance in addition to self-monitoring its own operational status.



#### **Ultra-High Connectivity**

Dual-mode cellular communication over the world's most reliable and secure carriers ensures a 99.5% connection success rate, delivering reliable and consistent data transmission even in challenging environments



#### **Built-In Surge Protection**

Advanced surge protection against lightning and voltage spikes safeguards critical streetlight infrastructure.



#### **AI-Driven Adaptive Dimming**

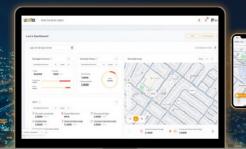
Participates with LEOLink RenAI to enable intelligent dimming strategies, including human-centric lighting adjustments based on real-time traffic, weather, and pedestrian activity.



#### **Predictive Maintenance & Analytics**

Advanced failure analysis and predictive diagnostics move cities from reactive to preventative maintenance strategies that reduce downtime and operational costs.

## LEO Link Ren A I<sup>™</sup>



**Central Management System** 

#### **KEY FEATURES**



#### **Asset Management**

Collect and track roadway infrastructure asset information such as streetlight fixtures, poles and controllers. to drive operational efficiencies across from field maintenance to life cycle management.



#### **Remote Control**

Remotely switch lights ON/OFF and adjust brightness via an intuitive user interface.



#### **Scheduled Dimming**

Automatically adjusts brightness levels based on ambient light and pre-set schedules.



#### **Fault Detection & Notification**

Monitor streetlight health and status in real time to detect and receive instant fault alerts.



#### **Energy Consumption Management**

Track usage, identify trends, and forecast energy needs for optimal efficiency.



#### **Data Analysis & Reporting**

Access historical insights, visualize data, and generate reports for informed decision-making.



#### **LiSA (LEOTEK intelligent Service Advisor)**

LiSA, our AI-powered assistant, is available 24/7 to streamline operations, quickly answering questions, generating charts and tables, and assisting with troubleshooting to lighten your team's workload.



Controller/Fixtures		NB01 Plus	EB01
	KarbonCobra	х	х
	VersaTEK Flood	х	Future
	VersaTEK Off Roadway	х	
	VersaTEK Site & Area	х	
	GreenCobra	х	
	Arieta	х	
	ILuzTEK	х	
<b>†</b>	Post Top Colonial	х	
	Eseta <sup>1</sup>		
	SafeGuardUTL	х	
	ComfortView	х	
	Non-LEOTEK Fixtures	х	

1 Limited to Eseta ES2
Fixtures with NB01 Plus require a controls-ready 5 or 7-pin NEMA connector
Not compatible with Current Selector

