



Intelligent Light Control System

Asset and Facility Monitoring

RA365 GEN 3
Smart Solar
LED Light



Integration and Monitoring

Asset and facility monitoring plays a vital role in maintaining operational reliability, safety and efficiency across critical infrastructure. Real-time data visibility, remote supervision and automated alerts enable early detection of anomalies, prompt response to potential failures and reduced unplanned downtime.

iLCS real-time monitoring and bidirectional control provide continuous supervision of mission-critical assets, ranging from streetlights and feeder pillars to military infrastructure. Supported by certified energy metering, remote alarms and automation features, this approach safeguards public safety and property.

Assessment and Design

We start with a detailed analysis of the operational context, existing assets and communication requirements. Based on this assessment, we design resilient architectures that balance performance, scalability and cost efficiency.

Deployment

All sensors and controllers are designed for plug-and-play installation by local electricians or certified partners, while commissioning and configuration can be carried out entirely remotely. This makes deployments extremely fast and scalable, reducing costs and project risks.

Integration and Control

Once installed, devices and gateways are unified under the iLCS platform, enabling real-time monitoring, analytics and responsive control. Operators can manage thousands of devices simultaneously through intuitive dashboards and automated workflows.

Lifecycle Support

Beyond deployment, iLCS ensures continuous monitoring, OTA firmware updates and modular expansion. Infrastructures evolve alongside customer needs, ensuring long-term resilience, minimised downtime and future-proof scalability.

Mission-Critical Applications

Trusted in defence, cities, districts and large facilities for applications such as adaptive lighting, feeder pillar monitoring, asset tracking and infrastructure automation at scale.



TRIMAX
LED Smart Light

Key Features



Remote
Commissioning



Fast and Scalable
Deployment



Plug-and-Play
Installation



Multi-Network Support
(LoRaWAN, 5G, NB-IoT, Wi-Fi)



Real-Time
Responsive Control



iLCS Key Components



Smart Node

An intelligent multi-sensor in a standalone compact case solution that measures air quality, tracks noise pollution and analyse traffic flow, all monitored in real-time that supports quicker data-driven decisions. This compliments urban well-being proactively, meanwhile, improving road safety.



Data Control Unit (DCU)

A powerful gateway that enables a wireless mesh connection for iLCS nodes and sensors while providing seamless, encrypted connectivity to the cloud. It is designed to ensure reliable and stable real-time data exchange for efficient remote monitoring, adaptive dimming and fault detection.



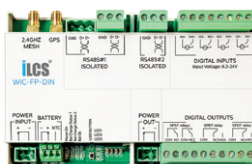
Light Control Unit (NEMA & Zhaga)

Both the iLCS Light Control Unit (LCU) NEMA and Zhaga are advanced plug-and-play devices designed for the remote control and monitoring of streetlights via AC and DC power supply, respectively. They provide accurate diagnostics of luminaire system operations through integrated features such as an energy meter, GPS and an astronomical clock, among others, enabling further optimisation of control functions.



Traffic Adaptive Illumination (TAI) Sensor

The TAI sensor, compliant with UNI 11248 standards, is a high-accuracy traffic counter capable of bidirectional vehicle detection and real-time adaptive dimming to generate significant energy savings. Equipped with arrays of tuned 24 GHz digital radar motion detectors, it enables long-range detection even under adverse weather conditions such as mist, rain and snow.



Feeder Pillar Controller

The Feeder Pillar Controller is a compact device that offers a retrofitting solution for existing feeder pillars, allowing remote control and monitoring of power distribution. It is highly flexible and can operate with various feeder pillar components through its ready-made input and output ports.



Smart Feeder Pillar

The Smart Feeder Pillar is built for remote control and monitoring of power distribution. It offers simplified IoT integration for operational control and advanced analytics, enhancing efficiency, enabling predictive maintenance and reducing downtime.



2018
Best innovative product - Middle East lighting
design summit 2018 (Dubai)

2018
Best innovative product -
Australian smart lighting summit

2019
Top 5 in category "smart city" at Handelsblatt
energy awards 19/20 (Germany)

2020
European product design award


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