FEASIBILITY AND COST-BENEFIT ANALYSES

Evaluation of the return on investment (ROI) for every project after a feasability and an energy saving study.

TRAINING

Comprehensive and documented training provided to the operator.

OUR SUPPORT

Nyx Hemera Technologies offers a turnkey service—from opportunity analysis to after sales service anywhere in the world. Services and support included with TLACS are:

ENGINEERING

Optimal integration with the lighting system. Nyx Hemera's team handles the project coordination along with its design, integration, and validation.

Includes:

- Project Management
- Engineering diagrams of the lighting;
- Development and validation for:
- The database with all lighting scenarios;
- A user interface with tunnel view, customized for every project;
- The **SCADA** database, including all interface documents;
- Factory Acceptance Tests (FATs);
- Validation and commissioning (SATs);
- Installation, operation, and maintenance manuals as well as any other project-related documents.

COMMISSIONING

Performed by Nyx Hemera's team, the commissioning and follow-up will ensure the highest operational efficiency.

TECHNICAL SUPPORT

Nyx Hemera offers a 24/7 support to the local maintenance team.



Power Line Addressable Control System



Luminaires **Operational** Cost life time efficiency Energy • Cable **Lighting system Flexibility** Installation optimisation Maintenance Security **System reliability** Number of interventions Safety



Adaptive Power Line Lighting Control





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 Remote control and monitoring for diagnostic and troubleshooting

• Reduced number of operation and maintenance interventions

• Energy savings from 25% to 75%

• Increased equipements' useful life



Adaptive Power Line Lighting Control



Nyx Hemera Technologies develops power line lighting control systems for road tunnels, underpasses, and any other areas where secured and seamless control and monitoring are required. The company's flagship solution is the TLACS.

We understand that effective management is critical in the use of different types of lighting. This is even truer for LED lighting systems in order to maximize their full potential. The TLACS was specifically designed for control (ON/OFF/DIM) and monitoring.

The TLACS is the most advanced and proven system available on the market today. With projects in Canada, United States, Europe, South America, the Middle East, and Asia, our simple and dynamic intelligent control system, combined with advanced sensors, adjusts the lighting levels per the real needs.

TLACS meets various regulatory standards as well as a variety of protocols to interact with smart systems, including Modbus, MQTT, OPC-UA, NTCIP 1213 and others. The TLACS is a Smart-City-ready system that can be easily installed either on new or existing structures since it uses the existing electrical cables as the communication medium for the individual management of each luminaire.

The solutions offer remote monitoring options that reduce the number of operation and maintenance interventions, with remote diagnostic and troubleshooting. It also increases the equipment's useful life with features that optimize the use of the luminaires.

Disclaimer: All of the above information, including drawings, illustrations, and graphic designs, reflects our present understanding, and is to the best of our knowledge. We believe that the data presented is accurate and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.



Power line addressable control and monitoring for tunnels, underpasses and other areas that offers improved safety and security, reduced operational costs and substantial energy savings.



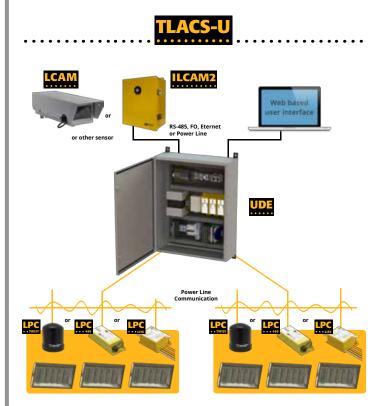
Scalable system for dynamic tunnel lighting control and monitoring



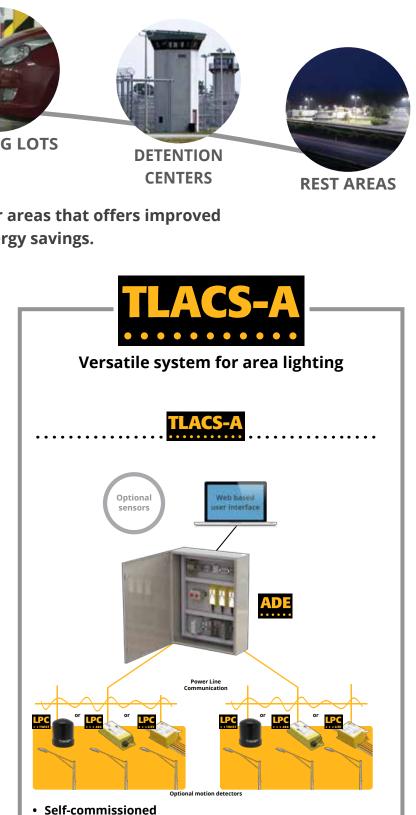
- Dynamic control and monitoring of the tunnel lighting per outside luminance, dirt accumulation and the degradation factor of the luminaires
- Remote monitoring of the lighting system's electrical parameters for remote diagnostic
- Luminaire alternation in order to even out and extend lifespan
- Calculation of the hours of use for each luminaire
- Intuitive user interface for easy onboarding and operator management
- Fail-safe mode



Adaptive system for underpass lighting



- Self-commissioned
- Calculation of the hours of use for each luminaire
- Fail-safe mode
- Intuitive user interface for easy onboarding and operator management



- Highly secured power line communication for added protection
- Discrete: no antenna, no wires
- Intuitive user interface for easy onboarding and operator management
- Calculation of the hours of use for each luminaire
- Fail-safe mode