UNDERPASSES



TLACS-U+

Turnkey Electrical and Smart Lighting Control Systems for underpasses and short tunnels

Benefits:

- **Reduces risks associated with integrating components from different manufacturers**
- **Increases user safety**
- **Optimizes maintenance**
- **Reduces energy consumption**
- **Reduces carbon footprint**

- Simplified scalable system which adapts to different needs and environments
- Power line control solution (no control wiring required)
- Remote access via the intuitive customized **EOS** user interface
- Auto-configurable
- Compatible with Smart-City protocols

NYX HEMERA Technologies inc.

Adaptive Power Line Lighting Control

TLACS-U+

UNDERPASSES

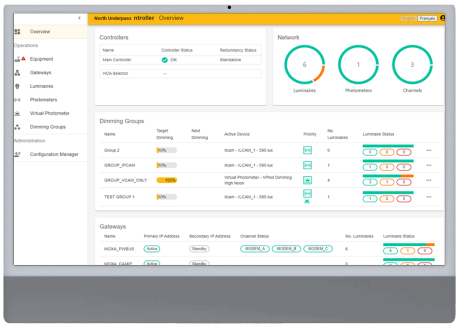
Upgrading the lighting in an underpass or short tunnel may require **upgrading the electrical infrastructure.** Nyx Hemera Technologies offers an integrated solution that simplifies the process of adding or upgrading tunnel lighting systems, ensuring the compatibility and performance of **power line** lighting control solutions.

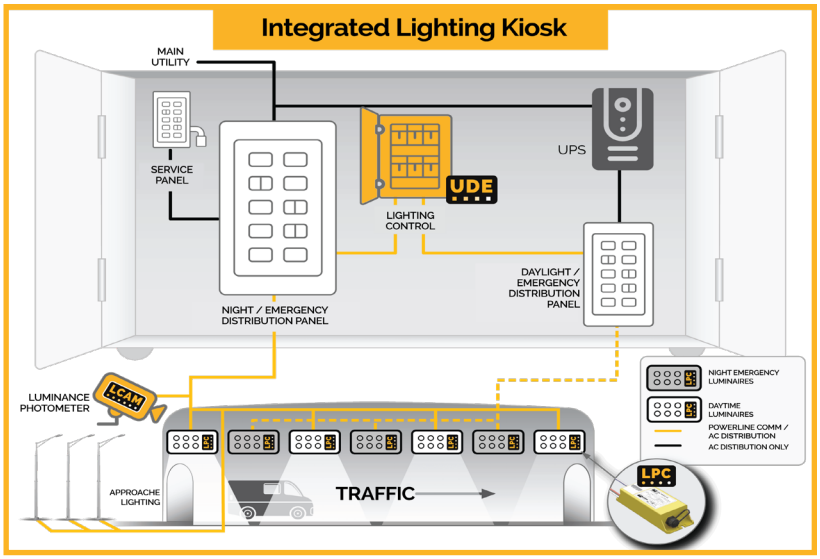
In addition to integrating the electrical installation for the lighting system and its control, **TLACS-U+** can incorporate other Intelligent Transportation Systems (ITS) equipment, such as video surveillance (CCTV), lane usage signs, and flashing lights.

This solution provides a one-stop-shop for seamless integration and operation of your underpass/short tunnel lighting system operation. **TLACS-U+** is designed to **optimize installation and operational efficiency,** improve **safety and reduce energy consumption.**

EOS

Remote access via the intuitive EOS interface





TLACS uses Power Line Communication technology to exchange data with devices connected to the same electrical phase network. This **eliminates the need for dedicated communication wiring** by transmitting control and monitoring signals over the existing power distribution conductors already used to supply power to the connected equipment.

The integrated solution includes:

Electrical cabinet
- Fully customized to the client's needs
- Typical specifications:
  - NEMA 3R or 4X
  - Stainless steel 316
  - With/without environmental control unit

Electrical distribution
- Electrical panel
- Night/emergency panel

Uninterruptible power supply (UPS) for night/emergency lighting
- From 2 KVA to 30 KVA
- Operating time from 30 to 90 minutes

UDE (Dimming cabinet for underpasses)
- Communication over powerline to PCs and luminance meter
- Manual control via HOA

Local controller
- Wide input range from 100 to 480 VAC
- Bidirectional communication via powerline
- Embedded power line filter and dynamic repeater function
- Individual luminaire monitoring and controlling
- Electrical parameters reporting of luminaires
- Control type: dimming 0-10 V, ON/OFF relay, and DALI
- Version with recessed or rotary lock (ANSI C136.41) for approach luminaires

Luminance Photometer
- Accurate measurement of luminance at the tunnel entrance
- Monitoring of photometer alignment
- Robust construction in 316 stainless steel
- Remote diagnostics and configuration

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Nyx Hemera Technologies

Nyx Hemera Technologies develops and installs smart lighting control systems for infrastructures where energy savings, reduced operating costs, improved safety, optimized operations, and sustainability are essential.

The TLACS smart lighting control system has been installed in more than 200 infrastructures around the world over the past 20 years. It is agnostic, making it compatible with any type of luminaire.The company offers a turnkey service ranging from feasibility analysis to after-sales service.

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.

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