

Dellux Technologies adopted Ariane's Powerline Solution in their Intelligent Tunnel Lighting Systems

Dellux Technologies designs LED-based Tunnel Lighting Systems that allow to save on energy and maintenance costs, while increasing the visual comfort and tunnel safety. Backed by years of leadership in using LEDs for traffic applications, the beauty of Dellux solution resides in the built-in intelligence of each element to provide optimal lighting performance and adapt constantly to changing tunnel conditions.

The Ariane Controls powerline communication (PLC) technology was integrated in the tunnel lighting system as a reliable solution for data communication. Replacing the RF (Radio Frequency) and twisted pair communication links previously used in the system, Ariane's technology simplified the wiring complexity, reduced the costs and increased the reliability. Flexibility is also a key benefit of using the Ariane PLC technology, since the system expansion and maintenance can be now accomplished very easily.

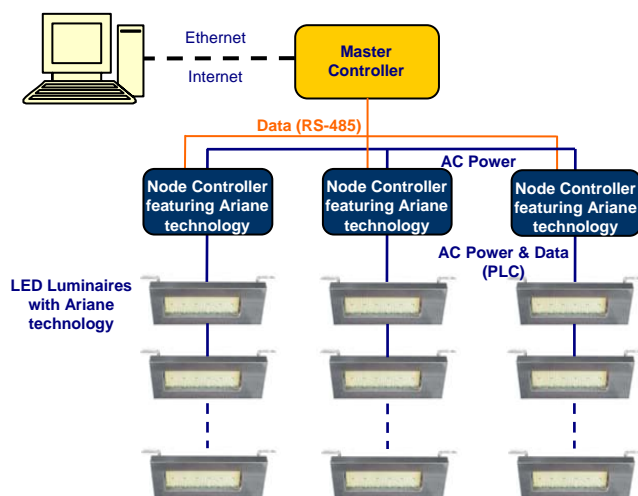


„Ariane Controls offered a ready-to-use, cost-effective, yet complete PLC solution. We were also impressed with their prompt and efficient technical support and engineering service.“ **(Daniel Chevalier, President of Dellux Technologies)**

System Description

A Master Controller manages all the lighting elements in the tunnel (including HPS lamps and Traffic Signal signs) and monitors strategic indicators, through a user-friendly web interface. The Node Controllers relay the control signals, issued by the Master Controller, to each Luminaire and report back on demand. The communication link between the Master Controller and the Node Controllers is achieved via a standard RS-485 or fiber optic link.

Previously, each Node Controller addressed a cluster of luminaires via RF or single-wire (dedicated hardwired link). Since the Ariane Controls technology was implemented in the Node Controllers and Luminaires, data communication is now performed via the same lines that provide power to devices.



Advantages

of using the Ariane PLC technology

- Greatly reduces the system complexity
- Allows easier installation, management and expansion of the lighting system
- Enhances system reliability and performance