

Lighting Control Cabinet – (LCC)

General Description

The LCC is an integrated control cabinet specifically designed for tunnel lighting control. It supports multiple configurations allowing optimal solutions targeting a wide range of tunnels layouts.

The LCC is use in a TLACS-EM configuration to individually control every luminaire or in hybrid configuration mainly supporting very long tunnels. It interfaces with Luminescence Photometer (LCAM) and the Illuminance Photometer (ILCAM 2).

As optional features, the LCC can include redundant Network Controller (NWC) components, a SCADA connection, a data logger to keep and historic of the operations and a 15 inches Industrial touch screen display for an easy control and operation of the lighting system through an intuitive Human Machine Interface.



Features

- Lighting controlled by luminescence photometer, time-based schedule or manually through HMI
- Configurable adaptive lighting zones.
- Luminescence photometer value can be shared across tunnels as backup photometer
- Embedded Web Server for remote access and system monitoring.
- Serial (RS-485) connection
- One Ethernet Interface
- Communication failure detection
- Integrated self-diagnostic

Specifications

Mechanical

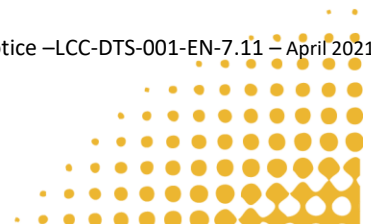
Item	Description
Enclosure	Painted Steel or Stainless Steel 316
Dimensions (overall)	36"H x 30"W x 16"D, in case of larger installation, more LCC may be use

Electrical

Item	Description
Input Voltage (Nominal)	120-240 VAC
Frequency	50/60 Hz
Consumption	Max 600W

Interface

Parameters	Description
RS-485	Up to 1200 meters / 4000 ' (shielded twisted pair, min AWG 24)
Ethernet	RJ45 Interface 10/100 Mbit/s
Fibre Optic	Single or Multimode (LC or SC)

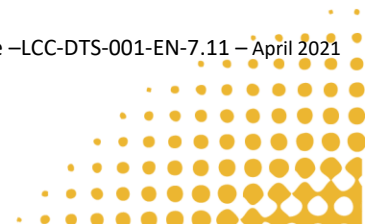


Environmental

Parameters	Description
Operating temperature	0°C to 60°C
Storage temperature	-25°C to 75°C
IP Rating	IP 65

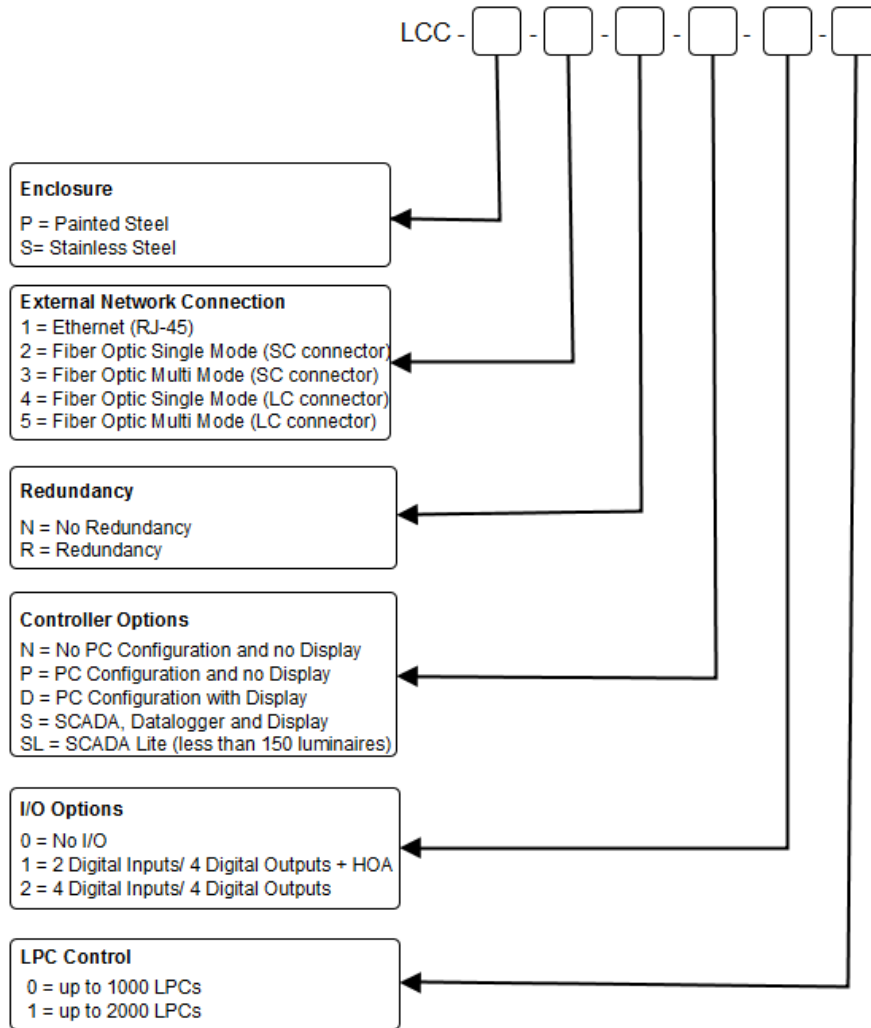
Standards

Safety (Cabinet)	CSA 60950-1-07 Second Edition CSA-C22.2 No. 0-10 CSA C22.2 No. 0.4 CAN/CSA-C22.2 No. 14 UL 508A (2nd Edition)
EMC Emission (NWC)	FCC 47 CFR Part 15/Subpart B, Class A Level ICES-003 Issue 6 January 2016
EMC Immunity (NWC)	EN 55024:2010 EN 61000-4-2 (Electrostatic discharge) EN 61000-4-3 (Radiated, radiofrequency, electromagnetic field) EN 61000-4-4 (Electrical fast transient/burst) EN 61000-4-5 (Surge) EN 61000-4-6 (Conducted disturbances) EN 61000-4-11 (Voltage dips, short interruptions and voltage variations)



Product Ordering Information

LCC- product identification follows the chart diagram below.



Other options available, please contact info@nyx-hemera.com for:

- Optional Customized Human Machine Interface as per tunnel configuration
- Optional maintain of the historical data on lighting stage transition/alarm/user intervention
- Optional support of multiple standardized communication protocols for easy interface to any SCADA type system

