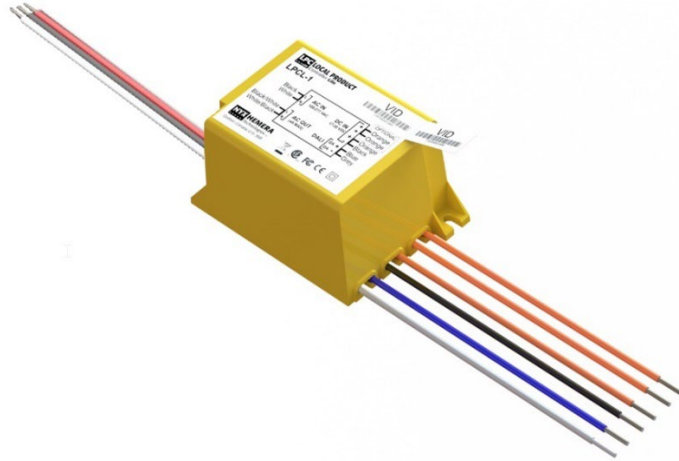


Local Product Controller Lite (LPC Lite)

General Description

The LPC Lite is a TLACS luminaire local controller. It provides two-way communication between luminaires and the TLACS main controller. It is used to individually control and monitor luminaires. Specifically designed for 100-480 VAC infrastructure installations, it is embedded in a luminaire and has a flexible interface with the new generation of DALI luminaire drivers.

The LPC Lite communicates over the power line (PL) using a proven and reliable protocol, thus greatly reducing installation, deployment, and operating costs.



Features

- Wide input range: from 100 to 480 VAC
- Two-way power line communication (without additional control wiring)
- Embedded power line filter and dynamic repeater function provide the optimum level of communication robustness
- Individual luminaire monitoring and controlling
- Voltage, current, power factor, power consumption, diagnostic and luminaire status reporting per chosen driver's capability
- Light loss compensation for luminaire light loss depreciation
- Configurable fail-safe switching mode (ON/OFF/DIM)
- Luminaire alternation function for average luminaire lifetime
- Control type: DALI

Technical Specifications

Electrical Specifications

Item	Units	Min	Max	Comment
DC supply input	VDC	18	32	
Power consumption	W	1 (typical)	2 (peak)	
Input voltage (nominal), 100-480 VAC	VAC	100	530	
Frequency (nominal) 50/60 Hz	Hz	50	60	
Load rating	A		3	At 55°C; see derating curve

Interface Connections*

Item	Description
RS-485 connection	Serial communication up to 115 200 bps
Digital DALI interface	Embedded DALI supply max. 10 mA typical, up to 5 drivers, 2 mA max./driver
Dry contact sensor	Closed-contact detection. Output 14 V, source current 10 mA.

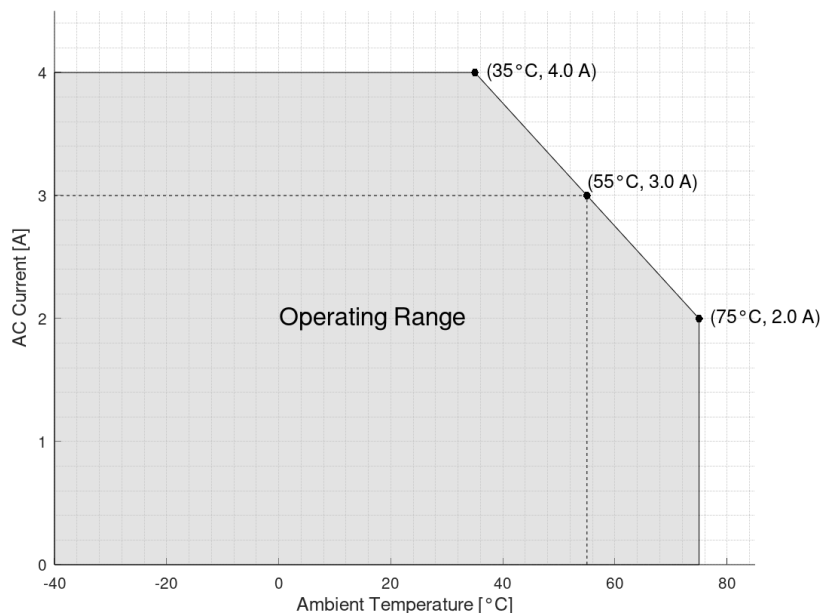
*Dry contact sensor cannot be implemented if the DALI interface is used for luminaire control.

Environmental Conditions

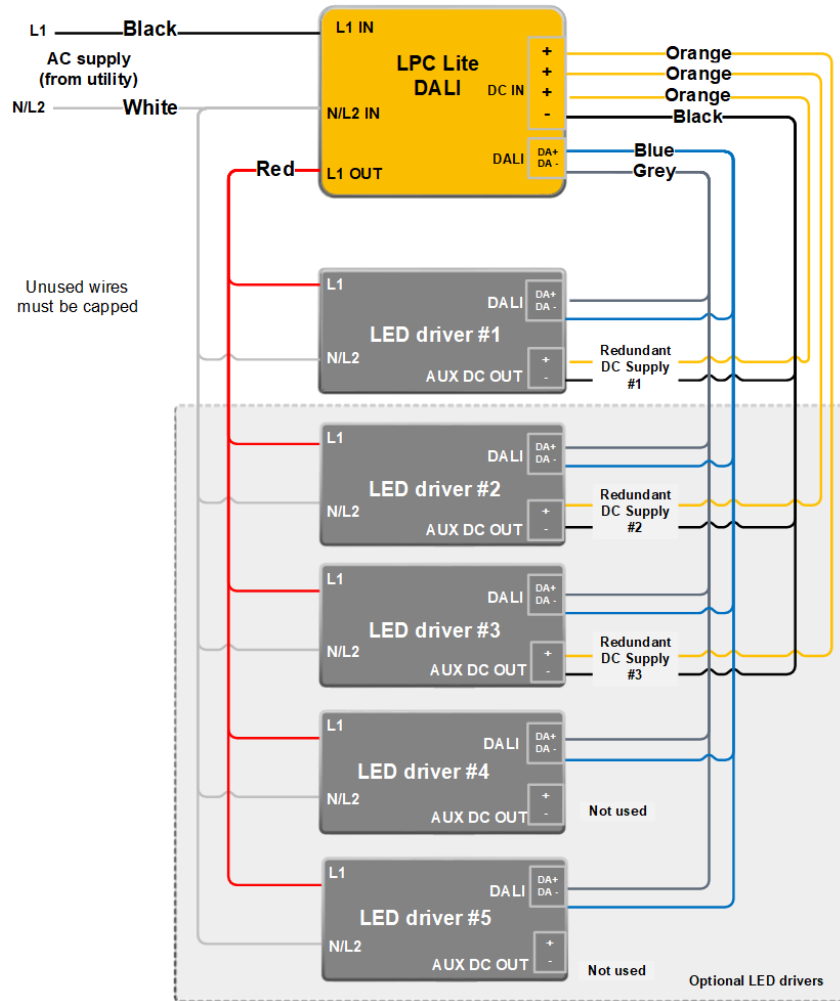
Item	Value
Operating temperature	-40 to 167°F (-40 to 75°C)*
Storage temperature	-40 to 185°F (-40 to 85°C)
IP Rating	Open Type - for installation in a suitable enclosure

*According to derating curve

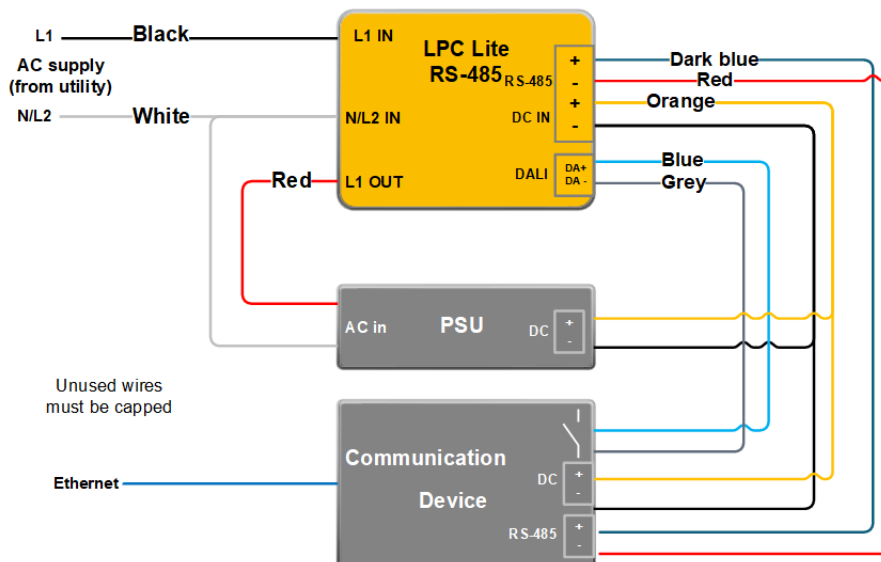
Load Current vs Temperature Recommended Derating Curve



Wiring Diagram for DALI



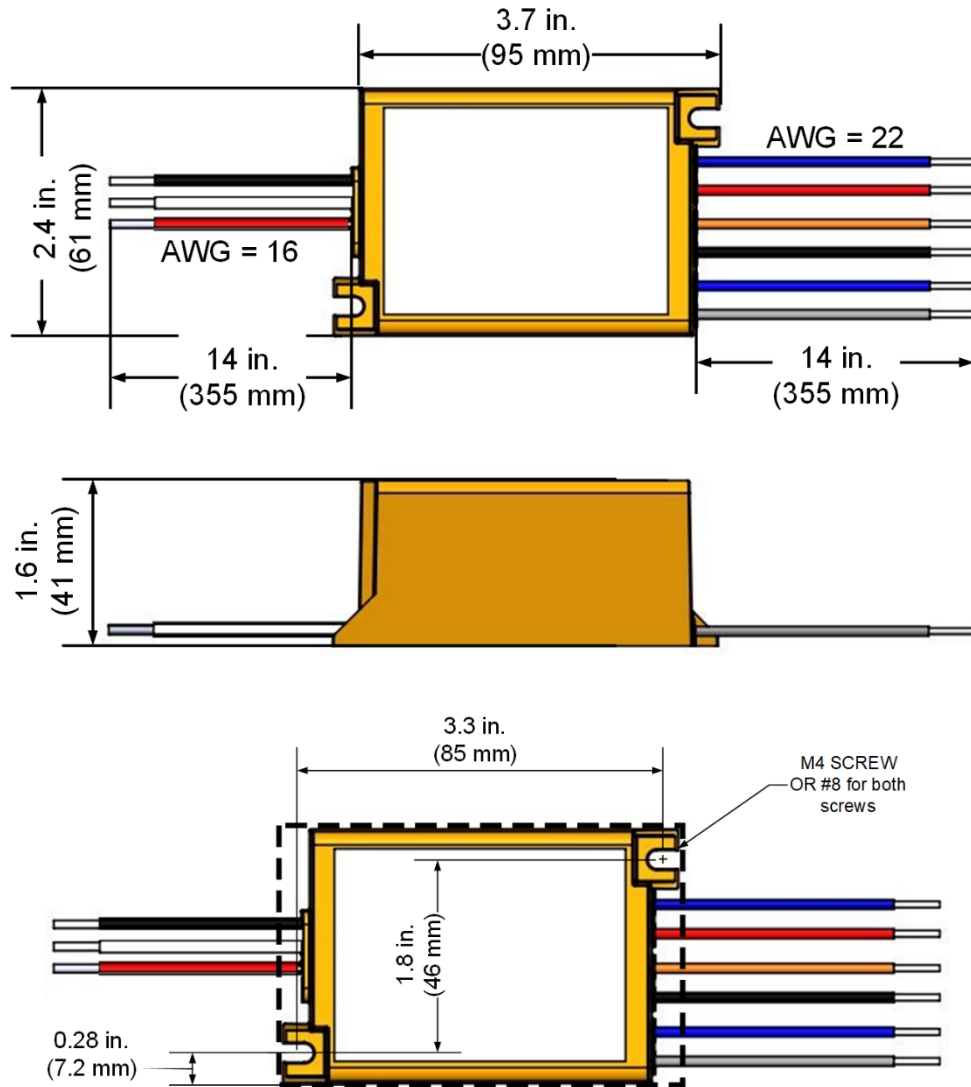
Wiring Diagram for RS-485



Mechanical Specifications

Dimensions

Overall (L x W x H): 3.7 in. x 2.4 in. x 1.6 in. (95 mm x 61 mm x 41 mm)



Standards

Item	Description
Energy management	UL 916 UL Standard for Safety Energy Management Equipment
EMC standards	EN 55032:2012/AC: 2013 EN 61000-3-2: 2014 (Harmonics) EN 61000-3-3: 2013 (Flicker and voltage fluctuation) FCC 47 CFR Part 15, Subpart B ICES-003 Issue 6 January 2016
EMC immunity	EN 55024:2010 EN 61000-4-2 (Electrostatic discharge) EN 61000-4-3 (Radiated, radio-frequency, 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



Segment Name (Left to Right)	Segment Value	Description
Model	LPCL	Local Product Controller Lite
Communication interface	PL	Power line communication
Input voltage range	9	100-480 VAC input voltage
Channel	1	1 channel (filtered)
Luminaire interface	D	DALI luminaire interface
	R	RS-485
Features	0	Luminaire control/monitoring
	1	Reserved, do not use
	2	Modem
	3	Photometer (monitoring and control)

- P/N for LPC Extended Warranty 5 additional years: LPCL-EXT-W5

For more information, please do not hesitate to contact the Nyx Hemera team at info@nyx-hemera.com