

## Local Product Controller 480 (LPC 480)

The LPC 480 provides two-way communication between luminaires and the TLACS main controller and is used to individually control and monitor luminaires. Specifically designed for 100 to 480 VAC installations, it can be embedded in a luminaire or installed in a junction box.

The LPC 480 communicates over 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
- **New:** 277 VAC neutral loss detection for driver protection (PL10 model only)
- 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, status, and alarm reporting
- Light loss compensation per luminaire burn hours.
- Configurable fail-safe mode (ON/OFF/DIM)
- Luminaire alternation support to average luminaire usage
- Control type: 0-10 V dimming, ON-OFF relay, and DALI



## Specifications

### Electrical

Item		Description
Input voltage (nominal)		110 to 480 VAC (min 90 VAC, max 530 VAC) with 277 V neutral loss protection
Frequency (nominal)		50-60 Hz
Consumption		Peak 4.5 W Typical 3 W
Load rating	100-347 VAC	<b>UL 916</b> Steady state current: 5 A Peak current: 450 A Pulse width @10%: 1.15 ms Cycles: 15000
	480 VAC	<b>UL-tested and approved</b> Steady state current: 2.5 A Peak current: 654 A Pulse width @10%: 0.908 ms Cycles: 25000

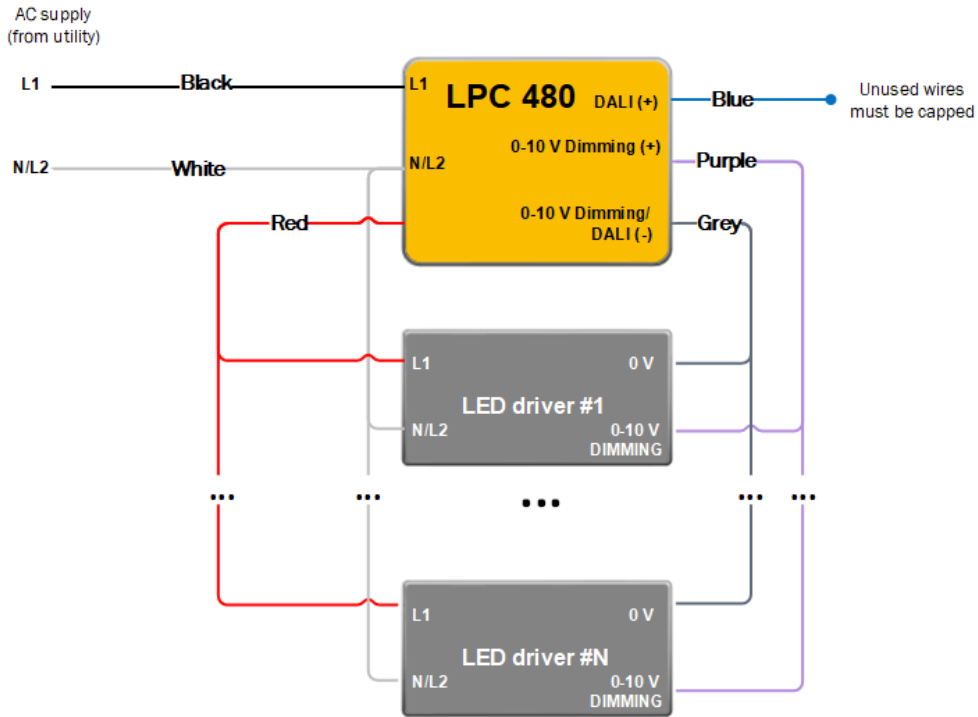
### Luminaire Interface

Item	Description
Analog interface	0-10 V dimming, maximum sink/source current: 10 mA
Digital interface	Embedded DALI supply max 10 mA typical
Max number of luminaire drivers (typical)	5 drivers (2 mA per driver max)

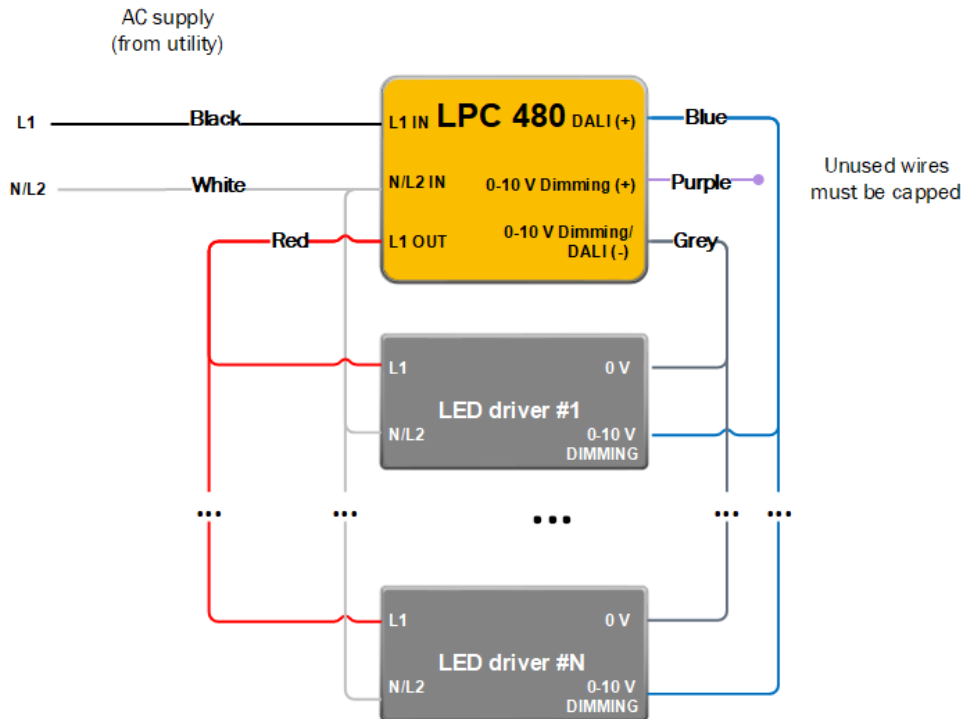


Wiring Diagram

0-10 V Dimming

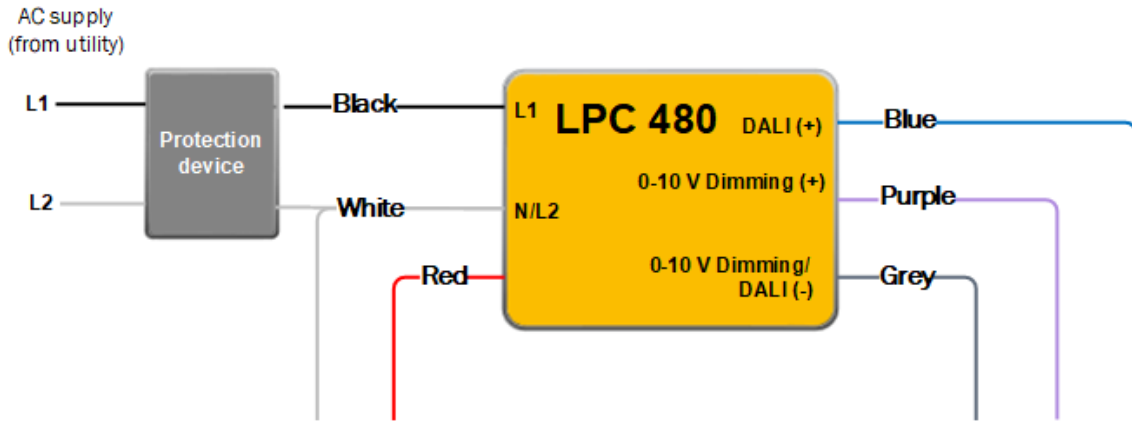


DALI Dimming



**Note:** When connected to 400-480 VAC, the LPC 480 shall be provided with two external listed Littelfuse or equivalent type class CC fuses rated 5 A, 600 VAC or listed circuit breaker rated with the following specifications: D curve or below, 2-poles, 15 A max, 277-480 VAC or better, UL 489 listed, or equivalent. The protection shall be located as follows:

**Input Wiring when Used with 480 V**



**Environmental Conditions**

Item	Unit	Min	Max
Operating temperature	°C	-40	75
	°F	-40	167
Storage temperature	°C	-40	85
	°F	-40	185
Rating	Open Type – enclosed energy management equipment		



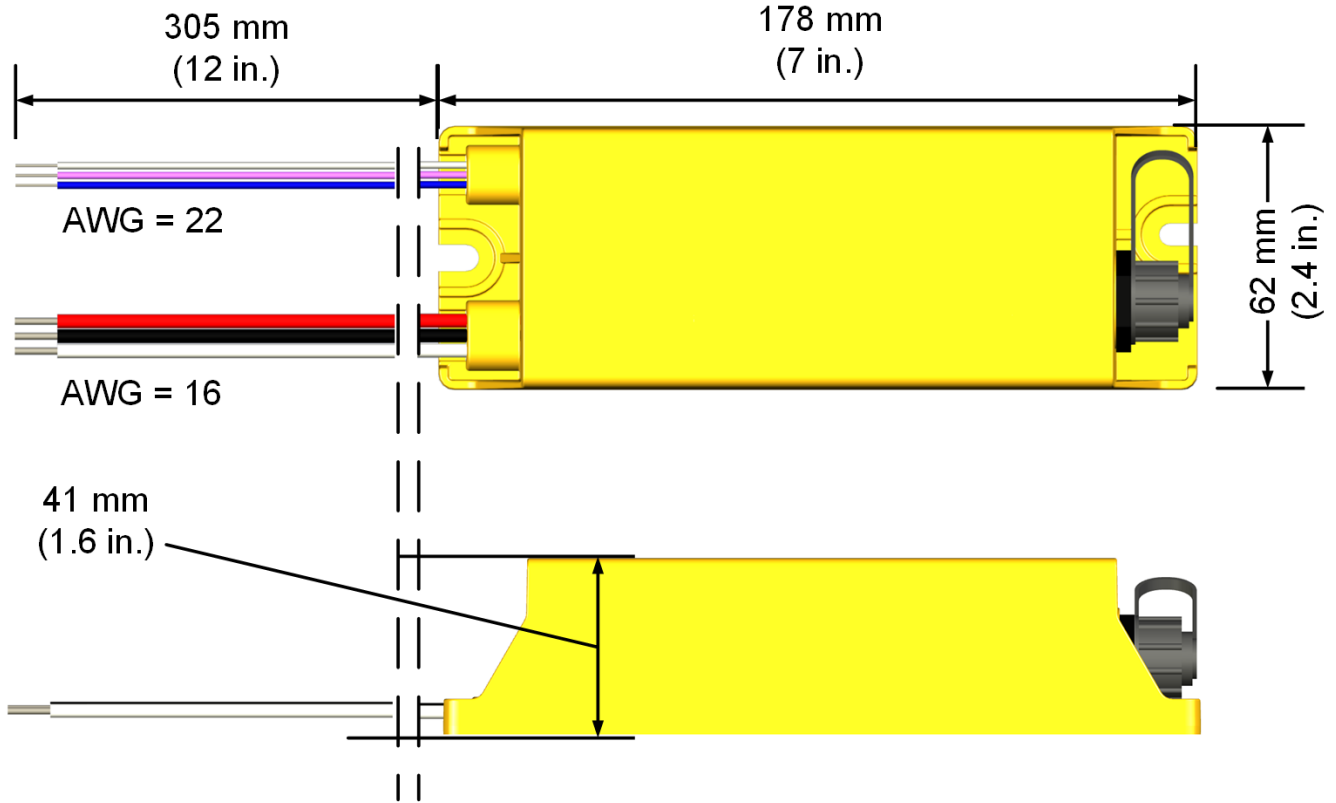
**Standards**

Item	Description
<b>Safety standards</b>	CSA 60950-1-07 Second Edition UL 60950-1, Second Edition – Certified to U.S. Standards CAN/CSA C22.2 No. 0-M91 (R2001) CAN/CSA C22.2 No. 60950-1-07, 2nd Ed. Am 2:2014 (MOD) ANSI/UL Std No. 60950-1-2014, 2nd Ed. IEC 60950-1:2005 IEC 60950-1:2005/AMD1:2009 IEC 60950-1:2005/AMD2/2013 UL 916
<b>EMC standard</b>	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
<b>EMC immunity</b>	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)

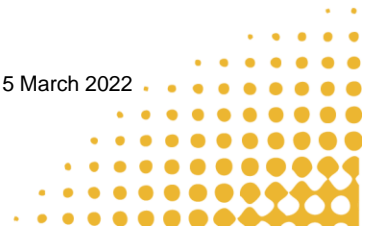
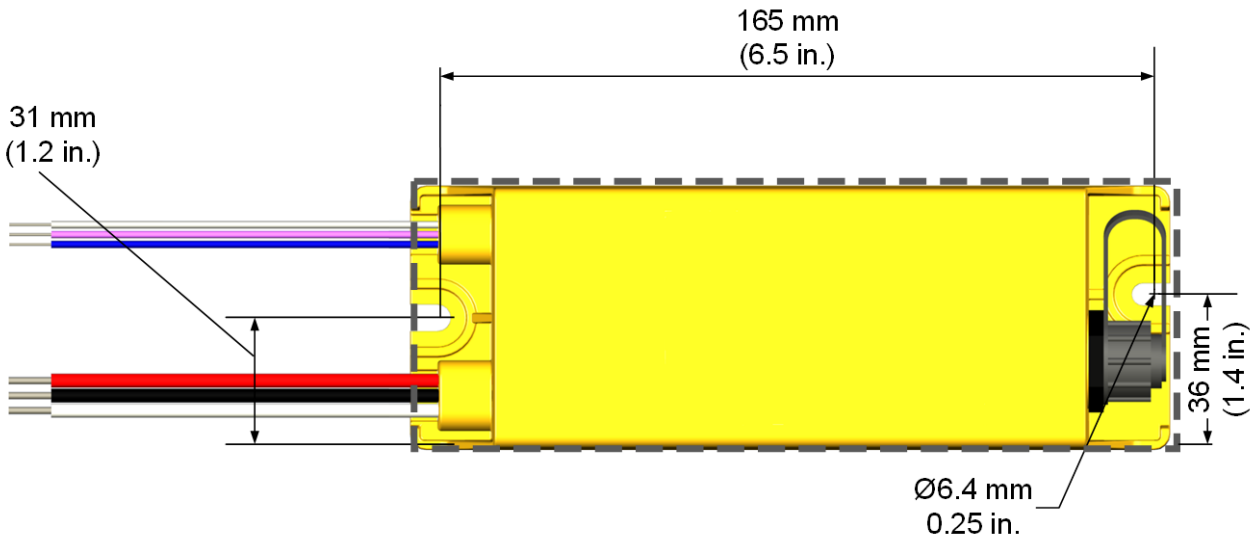


**Mechanical Dimensions**

Overall (L x W x H): 178 mm x 62 mm x 41 mm (7 in. x 2.4 in. x 1.6 in.)



**Drilling Template**



Product Ordering Information



Segment name (left to right)	Segment value	Description
Model	LPC	Local Product Controller 480
Communication interface	PL	Power line communication
Input voltage range	9	100-480 VAC input voltage
	10	277 VAC with neutral loss protection
	11	Replacement part for LPC-PL-1-A, where x = 1 to 7
Channel	1	Channel (1 relay, filtered)
Luminaire interface	B	0-10 VDC/DALI
Features	0	Luminaire control/monitoring 2% accuracy meter
	1	Luminaire control/monitoring 0.05% accuracy meter
	2	As a Modem
	3	Photometer (monitoring and control)

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

For more information, please contact us at [info@nyx-hemera.com](mailto:info@nyx-hemera.com)

