

# Luxima™

by Lumina

## Energy Savings & Optimal Security



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# Luxima

by LUMINEX

GENERAL

## Energy savings for existing lighting installations

Lumnex presents **Luxima**, an **electronic configurable and programmable ballast** that allows you in existing lighting installations to obtain considerable gains in energy performance, **to save up to 50% on your energy bill** with an ROI of between 36 and 60 months. Replacing your ferromagnetic ballasts, the installation and configuration of Luxima ballasts is simple and straightforward.

Our products also extend the useful life-time of the lamp and help preserving the lamp's performance by regulating the lamp current and managing the lamp power independently of the mains supply voltage. It is the best economical solution for your requirements.

## Security in public places

Luxima can be configured to autonomously dim the power of your lighting points at a predefined period of the night for adjusting the lighting level to the requirement while preserving the high level of security in public places. Let's remember that a dimming of 60% in the middle of the night doesn't produce a perceivable difference in lighting for the pedestrians or drivers of motor vehicles.

## Opt for Smart Technology

Luxima embodies smart technologies with integrated **fault detection mechanisms**. The parameters of the previous three nights are stored and analysed, by using a «Dongle» they can be accessed and analysed for detecting abnormal performances (short-circuited lamp, lamp is hard to ignite etc...). The Dongle and associated software also **allows real-time testing and real-time command of the lamp**, displaying parameters like voltage and power to the lamp, the ballast's temperature etc. (*ref. figure, page 6*). The Luxima can be included in any DALI compatible network



FEATURES

# Dimming: programming methods

## Lumnex\* method

The dimming is managed as a percentage of the night (ref. figure 1). The dimming profile follows the variations of the duration of the night over the year (ref. figure 3).

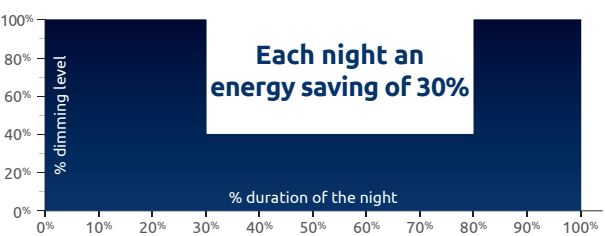


figure 1

The energy savings are expressed as a percentage of the energy bill.

## Mid-Point method

The dimming is managed by hour (ref. figure 2). The dimming profile is stable during the year (ref. figure 3).

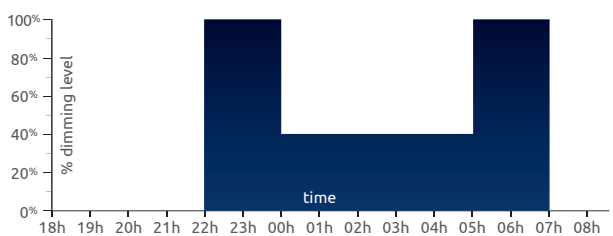


figure 2

The energy savings are expressed in kWh (Power x Dimming x Duration)

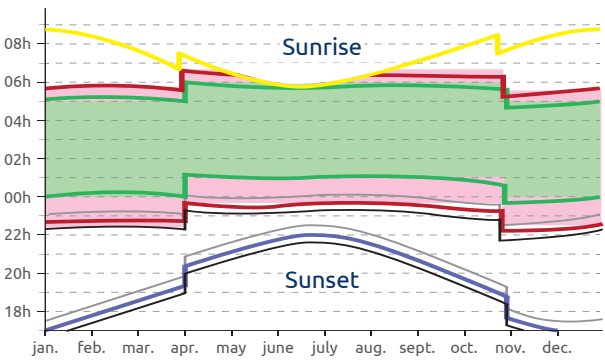
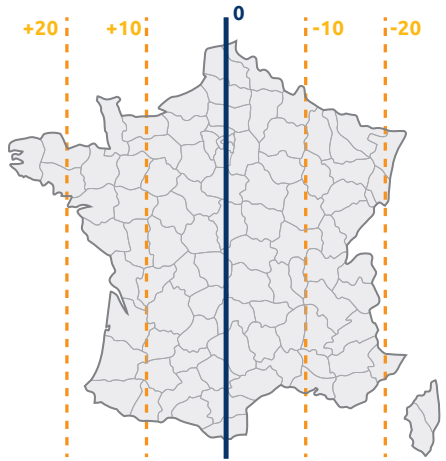


figure 3

- Version 1**
  - 0h to 5h winter (1h to 6h summer)
  - Real switch-off in Paris (variation < 15min)
- Version 2**
  - 22h30 to 5h30 winter (23h30 to 6h30 summer)
  - Real switch-off in Paris (variation < 15min)
  - Brest (sunset and sunrise)
  - Strasbourg (sunset and sunrise)



Example: variation of dawn/dusk over France (in minutes)

\* Lumnex method: patent n°FR12.61223 of nov. 26, 2012



**Features (continued)**

Luxima opens the possibility to manage **two different dimming profiles according the season (summer / winter)**, which allows to illuminate following the evolution of the requirements and increase the energy savings.

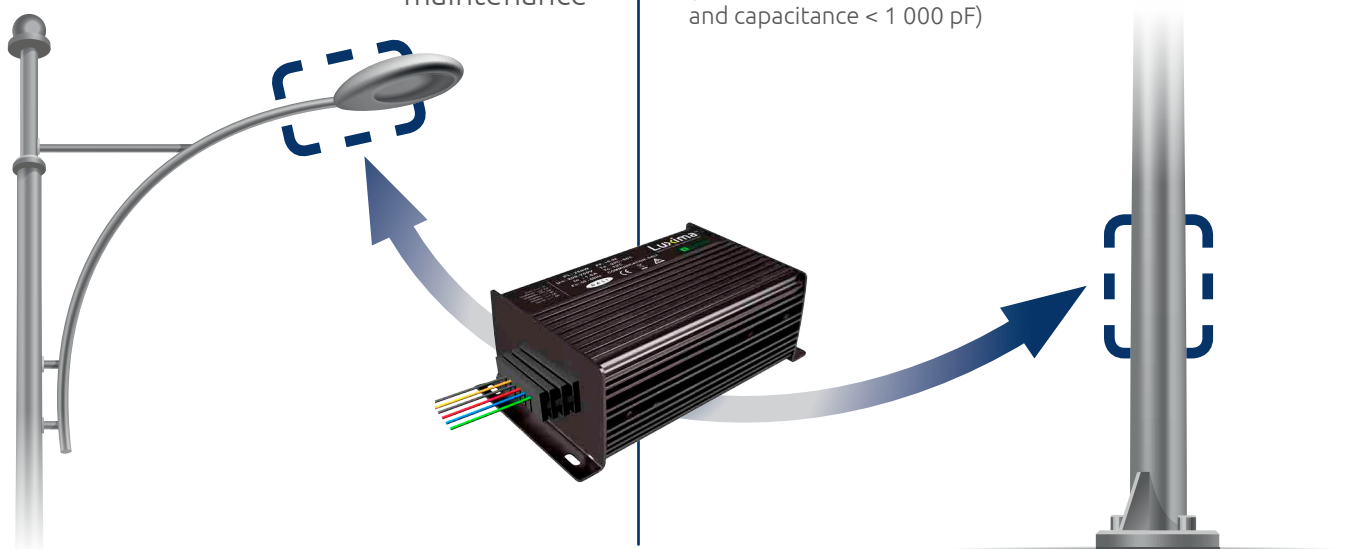
The Luxima is a Class I ballast with Protective Earth wire. It includes advanced protection mechanisms like:

- Protection of the light source by careful management of its heating current.
- Short term full power operation of the lamp at switch-on and after switch-off by a DALI command.

**Installation**

**In the luminary**  
with a DALI wire descending inside the pole for convenient maintenance

**At the bottom of the pole**  
Maximum distance of 15m between ballast and lamp.  
(for cable section > 1,5mm<sup>2</sup> and capacitance < 1 000 pF)





# Technical characteristics

**Luxima 250W & Luxima 400W**  
**Lamp technologies: HPS, MH**

## Common characteristics

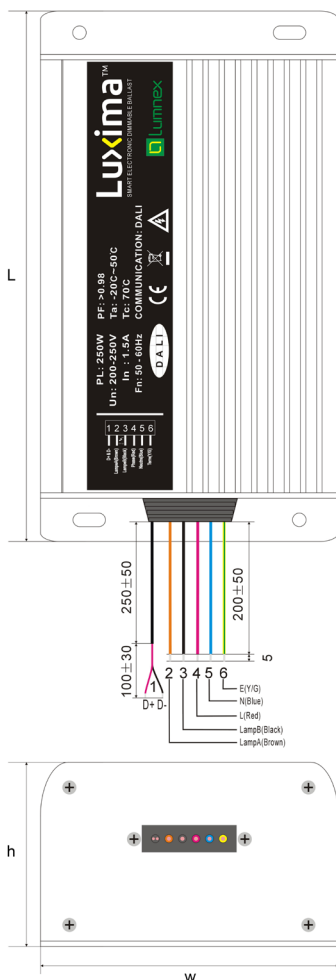
Input voltage	200 V -10% to 250 V +10%
Input frequency	50/60 Hz
Power factor @ 100% lamp power	> 0,98
No load / Standby power	< 1,2 W
Ingress Protection (case in vertical position)	IP 52
Electrical isolation	Classe I with Protective Earth
Ambiant Operating temperature (Ta)	-20°C to +50°C
Maximum case temperature (Tc)	< 80°C
Lifetime	> 80 000 h
Warranty	5 years*

## Applicable standards

- European safety directive for low voltage equipment 2006/95/EC with test report S-L1405001
- Electronic ballast for HID lamps EN 61347-2-12
- European EMC directive 2014/30/EU with test report E-E1405002
- Emitted interference EN 55015 : 2013
- Harmonized standard for immunity to electromagnetic interference EN 61547 : 2009
- Electromagnetic Compatibility (EMC) EN 61000

## Environmental protection

- European directive RoHS 2011/65/EU
- WEEE 2012/19/EU



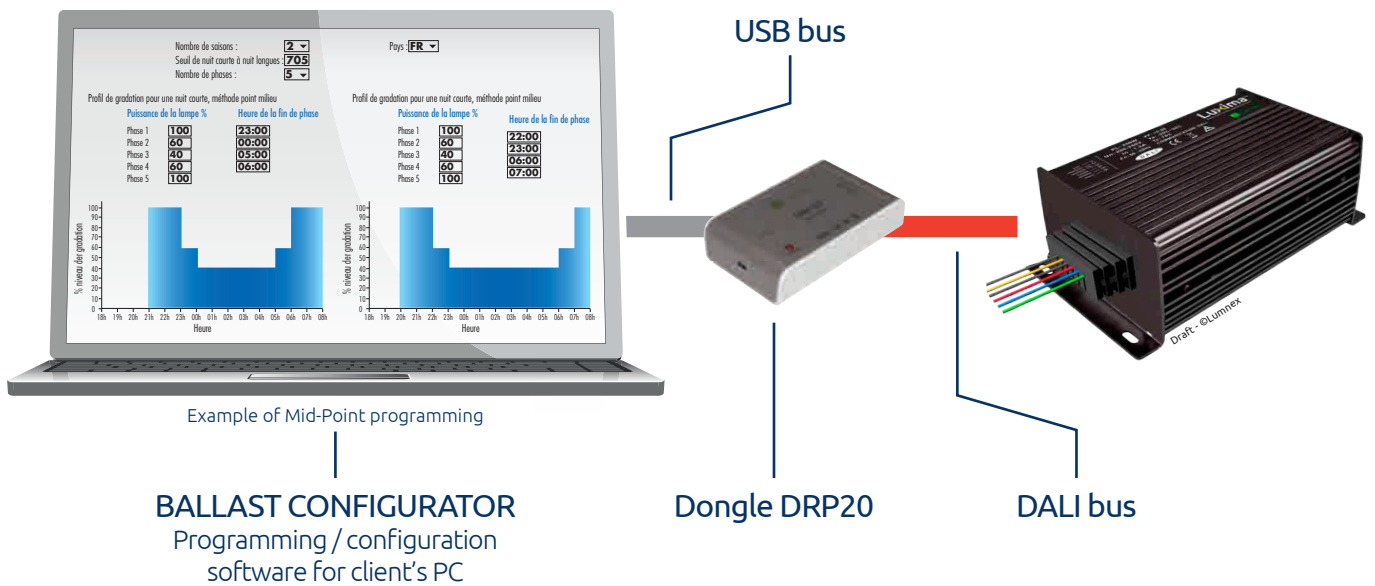
### Luxima 250W Specifications

Dimensions 200 x 110 x 68.5 mm (Lxwxh)  
 Weight 1.4 kg

### Luxima 400W Specifications

Dimensions 220 x 110 x 68.5 mm (Lxwxh)  
 Weight 1.7 kg

# Set-up for programming



## Future proof Ballast towards intelligent lighting management

The possibility to modify the programmed lamp-type and dimming profiles by merely using the dongle and the Ballast Configurator software ensures that your Luxima will also respond to the evolutions of your requirements!

Luxima provides a DALI bus interface for connecting to any DALI network, for example to a network built with Lumnex' communication nodes Axess PL (PLC) and Axess RF (wireless) series of networking nodes for being included into a remotely managed lighting control system.



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