

# NOVALIGHT OLC POLE DETECT

NL-OLCPDX-LX-XX-010

## OUTDOOR LIGHT CONTROLLER ON POLE WITH DETECTION

The NovaLight OLC Pole Detect can be installed easily on the mast of an existing street light and allows the adaptation of the light intensity as well as its neighbors based on a presence detection propagated over a robust 869 MHz wireless mesh network. It connects to a centralized software allowing reconfiguring the system easily and remotely.



### AT A GLANCE

Based on a presence detection, the NovaLight OLC Pole Detect increases dynamically the light intensity as well as its neighbors creating paths of light around the pedestrians. Thanks to this feature, substantial energy savings can be achieved. A centralized software allows the remote control of the system in order to facilitate its installation, maintenance and the monitoring of the energy consumption.

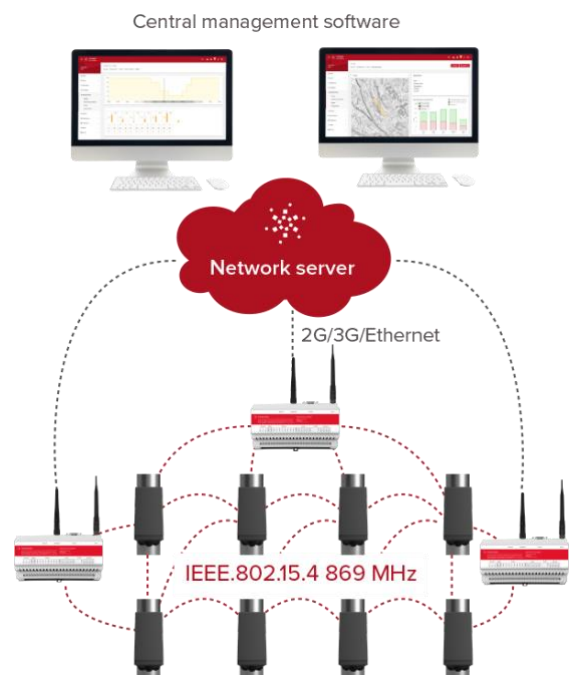
The controller features lighting switching on/off, dynamic dimming profiles application, fault detection and energy and power consumption measurement.

The solution relies on a powerful mesh network. This network follows new state of the art Industrial Internet of Things standards and works in 869 MHz frequencies offering excellent performance in terms of range and power consumption. Redundancy in the network is high because each device can relay information to its neighbors (mesh network). Furthermore, all transmissions are encrypted with AES-128 algorithm in order to ensure security.

### KEY FACTS

- Streetlight remote control and monitoring thanks to DALI or 1-10V interface (chosen when ordered)
- Dynamic dimming profiles

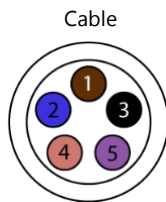
- Astronomical clock
- Energy and power consumption measurement with +/- 2% precision (voltage, current, power factor, frequency, power)
- Fault detection (connection, ballast, light, measurement thresholds, etc.)
- 230VAC power supply
- Industrial IoT Wireless Mesh Network IEEE 802.15.4 - 869 MHz
- AES-128 encryption within the mesh network
- Over-the-air reprogramming



## TECHNICAL CHARACTERISTICS

PHYSICAL PARAMETERS	VALUE	UNIT
Width	68	mm
Height	143	mm
Depth	65	mm

CABLES	POLES
Cable	5 poles for streetlight powering and control



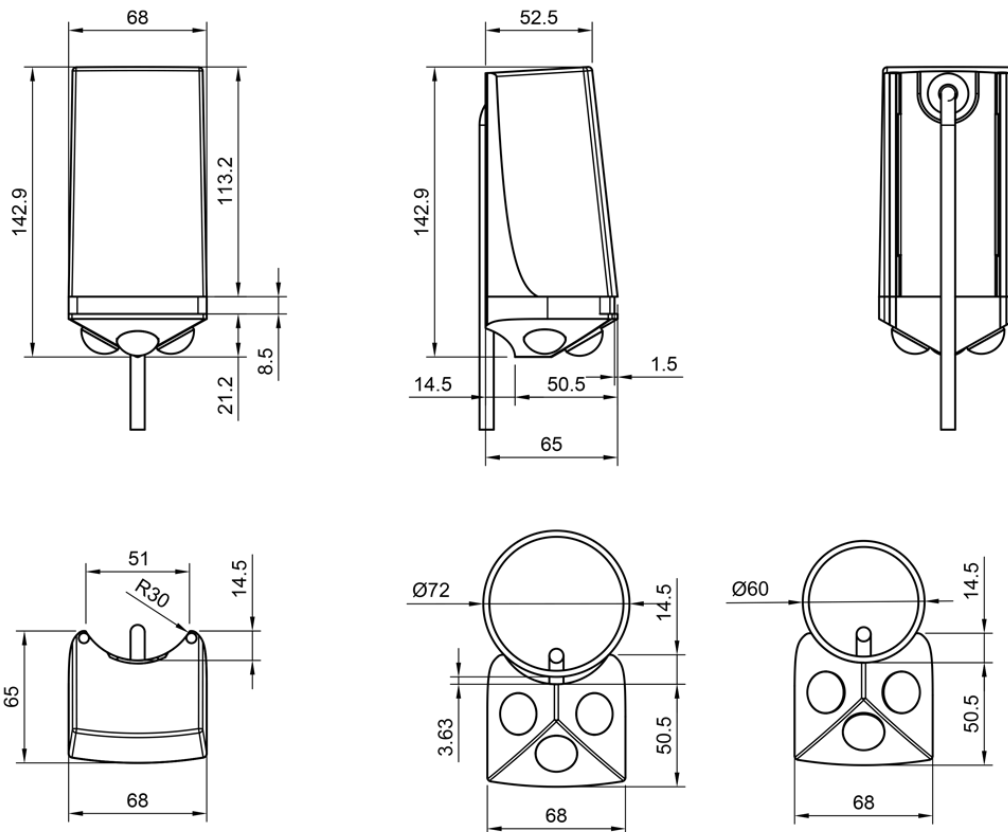
### DALI variant

- 1 [braun] = LI (Line IN)
- 2 [blue] = N (Neutral)
- 3 [black] = LO (Line OUT)
- 4 [pink] = DA+ (DALI+)
- 5 [purple] = DA- (DALI-)

### 1-10V variant

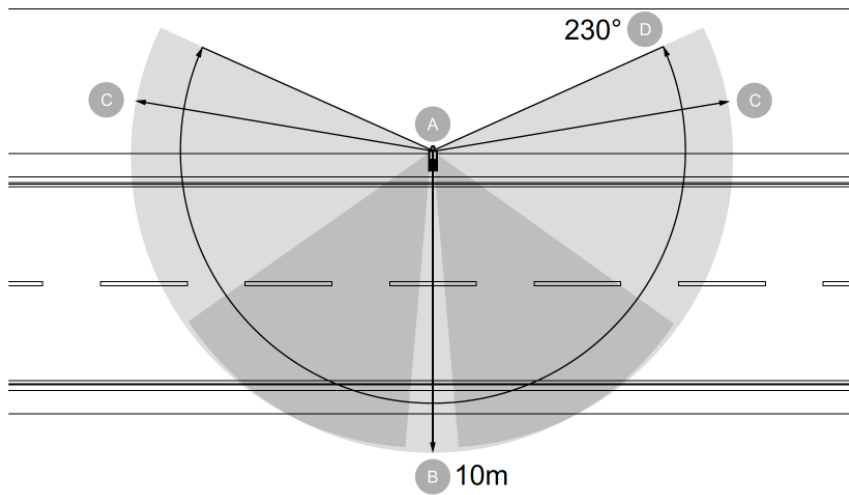
- 1 [braun] = LI (Line IN)
- 2 [blue] = N (Neutral)
- 3 [black] = LO (Line OUT)
- 4 [pink] = DIM+ (1-10V)
- 5 [purple] = DIM- (1-10V)

A part of the casing is magnetic and thus it will stick on ferromagnetic masts. Optionally a metal strap can secure the product on the mast. To put the cable into the mast a hole of 10mm must be drilled on the mast.

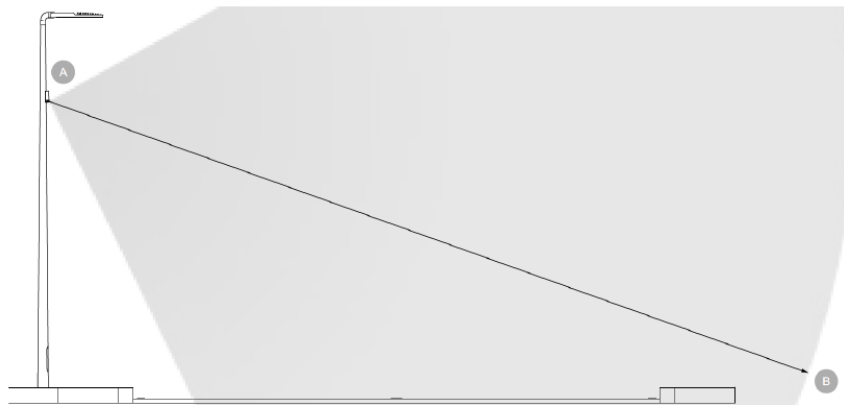


OPTICAL	VALUE	UNIT
Detectors	3 x passive infrared	-
Mounting height	5	m
Radius	230*	°
Frontal range	10	m

\* for standard 60mm pole



- A OLC Pole Detect
- B Frontal range
- C Horizontal range
- D Radius



- A OLC Pole Detect
- B Frontal range

ELECTRICAL CHARACTERISTICS	MIN	TYP	MAX	UNIT
Input Voltage	85	230	264	VAC
Frequency	47	50	70	Hz
Load maximum power	-	-	600	W

<b>ENVIRONMENTAL PARAMETERS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNIT</b>
Ambient temperature	-30	-	+70	°C
Relative humidity	10	-	90	%RH
IP Protection	-	IP66	-	-

<b>DALI PSU</b> <b>(ONLY FOR THE DALI VARIANT OF THE PRODUCT)</b>	<b>VALUE</b>	<b>UNIT</b>
Max output current	50	mA

<b>1-10V</b> <b>(ONLY FOR THE 1-10V VARIANT OF THE PRODUCT)</b>	<b>VALUE</b>	<b>UNIT</b>
Max source/sink current	2	mA

<b>NOVACOM WIRELESS MESH NETWORK</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNIT</b>
Frequency	-	869.525	-	MHz
Bitrate	-	38.4	-	kbps
Power	-	-	100	mW
Sensitivity	-	-104	-	dBm

## CONFORMITY

Mark	CE (RED)
EMC	EN 301 489-3
SRD	EN 300 220-1/-2
Safety	EN 60950-1

## ORDER INFORMATION

TYPE	COLOR	
	Light gray (RAL7040)	Dark gray (RAL7015)
<b>Standard poles (<math>\varnothing &lt; 100\text{mm}</math>)</b>		
NovaLight OLC Pole Detect DALI	NL-OLCPD-L-LG-010	NL-OLCPD-L-DG-010
NovaLight OLC Pole Detect 1-10V	NL-OLCPD-LX-LG-010	NL-OLCPD-LX-DG-010
<b>Large poles (<math>\varnothing &gt; 100\text{mm}</math>)</b>		
NovaLight OLC Pole Detect DALI	NL-OLCPDB-L-LG-010	NL-OLCPDB-L-DG-010
NovaLight OLC Pole Detect 1-10V	NL-OLCPDB-LX-LG-010	NL-OLCPDB-LX-DG-010

## REVISION HISTORY

REVISION	DATE	COMMENTS
R01	February 28, 2019	Initial release
R02	June 7, 2019	Color reference, load maximum power specified at 600W in place of 300W
R03	July 11, 2019	Large pole support reference
R04	July 23, 2019	"Legacy" removed from product name

## CONDITIONS

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