NOVALIGHT OLC POLE

NL-OLCPX-LX-XX-010

OUTDOOR LIGHT CONTROLLER ON POLE

The NovaLight OLC Pole is a street light controller. It can be installed easily on the mast of an existing street light and connects to a centralized software over a robust 869 MHz wireless mesh network.

AT A GLANCE

NovaLight OLC Pole controllers give full control over a street lights installation in terms of remote control and monitoring. Substantial energy and operational savings can therefore be achieved.

The advantage of the NovaLight OLC Pole is that it can be installed on existing street lights, for example, streets which have been already migrated to the LED technology. Simply drill the mast and rewire the street light. The controller features lighting switching on/off, 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)
- 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
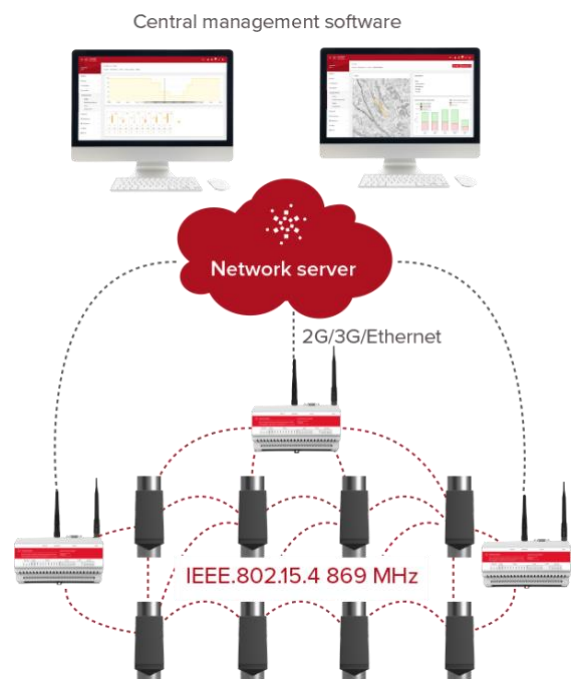
TECHNICAL CHARACTERISTICS

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

| CABLES	POLES
Cable	5 poles for streetlight powering and control

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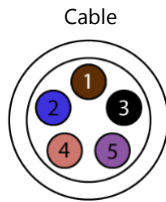
DALI variant
1 [braun]   = LI   (Line IN)
2 [blue]   = N   (Neutral)
3 [black]   = LO   (Line OUT)
4 [pink]   = DA+ (DALI+)
5 [purple] = DA-   (DALI-)

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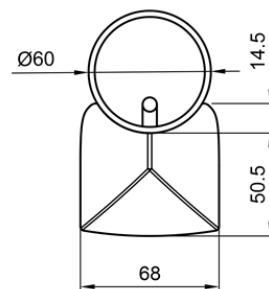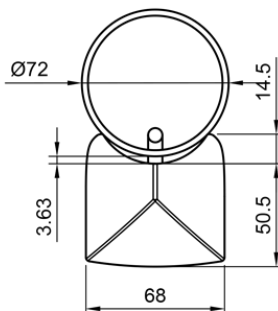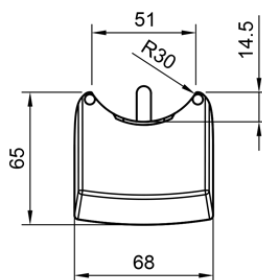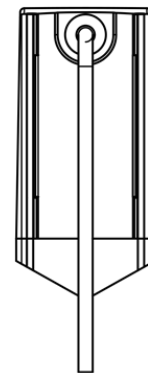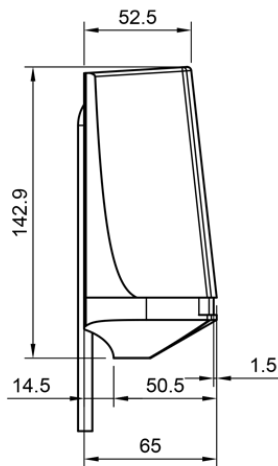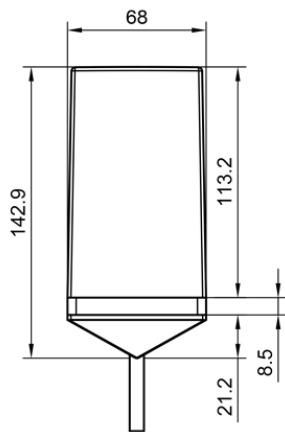
ELECTRICAL CHARACTERISTICS	MIN	TYP	MAX	UNIT
Input Voltage	85	230	264	VAC
Frequency	47	50	70	Hz
Load maximum power	-	-	600	W

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

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

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

NOVACOM WIRELESS MESH NETWORK	MIN	TYP	MAX	UNIT
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)
Standard poles (Ø < 100mm)		
NovaLight OLC Pole DALI	NL-OLCP-L-LG-010	NL-OLCP-L-DG-010
NovaLight OLC Pole 1-10V	NL-OLCP-LX-LG-010	NL-OLCP-LX-DG-010
Large poles (Ø > 100mm)		
NovaLight OLC Pole DALI	NL-OLCPB-L-LG-010	NL-OLCPB-L-DG-010
NovaLight OLC Pole 1-10V	NL-OLCPB-LX-LG-010	NL-OLCPB-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