nLUMINAIRE
by CABSY

Control & Power Your LED Lighting Fixture with nDriver

nLUMINAIRE
driver

The nDriver is an internet of things (IoT)-enabled platform specifically designed to power, monitor, and control LED light fixtures as it utilizes the latest power of ethernet (PoE) technology standard.

In the event of a server connection failure, the nDriver can establish a direct communication with the designated nController to receive all operational instructions. Then, once the server connection is restored, it will return to its original communication channel.

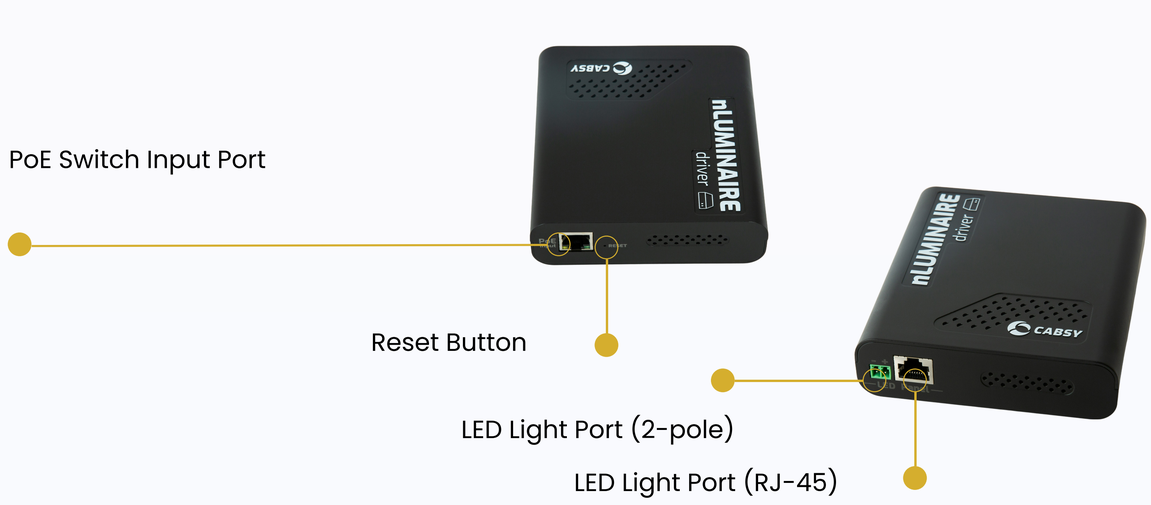
The nDriver is available in two models — constant current and constant voltage — both of which offer installers a quick and seamless connection and integration. Whether it is a constant current, white LED fixture or a constant voltage RGB strip, connection is simple with built-in and dedicated ports available in RJ45 and dry contact types.

Key Features & Benefits

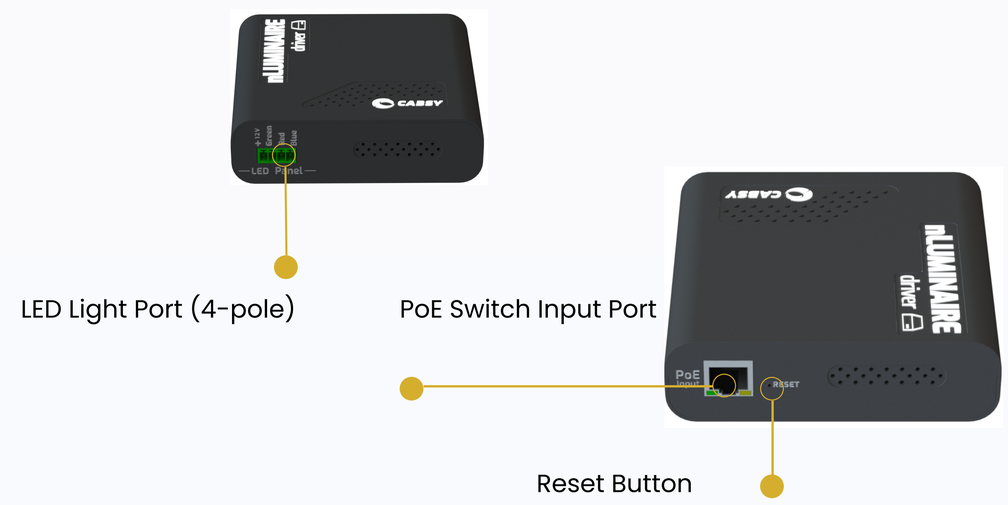
- Compliant with PoE-PD IEEE 802.3bt standard, supporting up to 99W
- Utilizes PoE infrastructure for lighting power
- Offers remote configuration and management
- Stores lighting configuration locally
- Supports any third-party, PoE network switches and LED lighting fixtures
- Simple to install, configure and operate
- Collects real time operational and status data
- Adjusts lighting dynamically to occupant needs and conditions
- Supports over-the-air (OTA) firmware update
- Does not require auxiliary power supply
- Includes dedicated RJ45 port for LED light fixture

Mechanical Interface

Constant Current nDriver **CY-NL-DRC100**



Constant Voltage nDriver **CY-NL-DRV100**



Technical Specifications

Inputs

PSE Input Connection	RJ45 Cat5e or higher
PoE Interface	PoE-PD IEEE 802.3 at/bt standards compliant
Interface Type	Power and data
Input Voltage	50-60 VDC
Maximum Input Power Rating	Maximum 71W at 100 meters from PSE to PD

Output (nDriver CC)

Type	Constant Current
Maximum Output Current	1.5 Amp
Output Voltage Range	24-48 VDC
Maximum Power Output	60W
Efficiency	93% efficiency at 60W output
Protection	Thermal, short-circuit and open-circuit protection
Dimming	10 - 100% dimming control with 1% increments available in mobile/web app

Output (nDriver CV)

Type	Constant Voltage
Maximum Output Voltage	12V
Maximum Output Current	2 Amp.
Protection	Thermal, short-circuit and open-circuit protection
Dimming	10 - 100% dimming control with 1% increments available in mobile/web app

Factory Reset

Reset Button	Push to reset system; long press (more than seven seconds)

Operating Environment

Temperature Range	0°C to 40°C
Humidity	10 - 90% non-condensing

Parts Included

Quantity	Component
1	nLuminaire Driver
1	Quick Installation Guide
1	Screw Kit
1	RJ45 to LED connector (not ethernet standard, 1-4 negative, 5-8 positive)

Standards

EN 55015:2019 + A11:2020	IEC 61347-1:2015 + A1
EN 61547:2009	IEC 62368-1:2018
IEC 61347-2-11:2001 + A1	RoHS

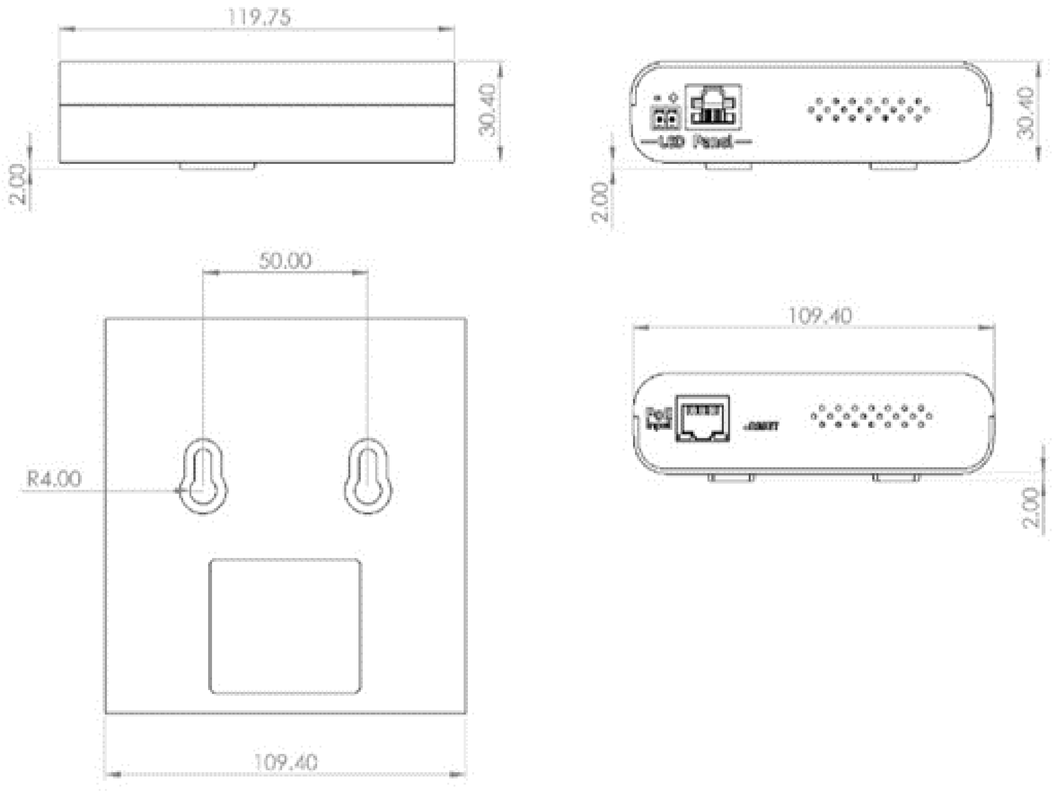
Warranty

5 years warranty (condition at www.cabsy.com)

Certifications

Region	Regulatory Compliance
Europe	CE

Dimensions in millimeters



Efficiency vs Dimming Percentage

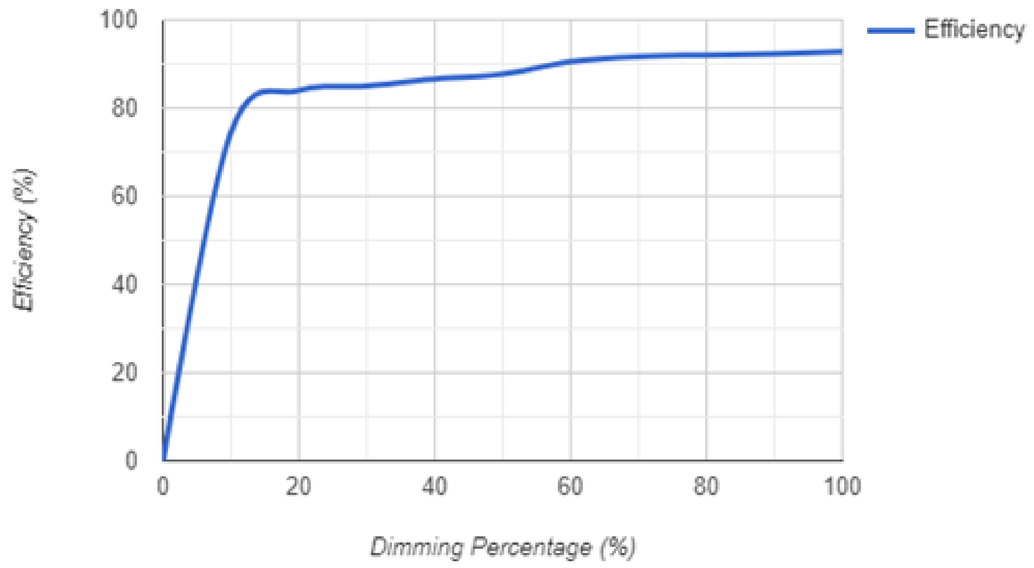


Figure 1:

nController at 60W (Conditions: Pin = 60W, V out = 38V)

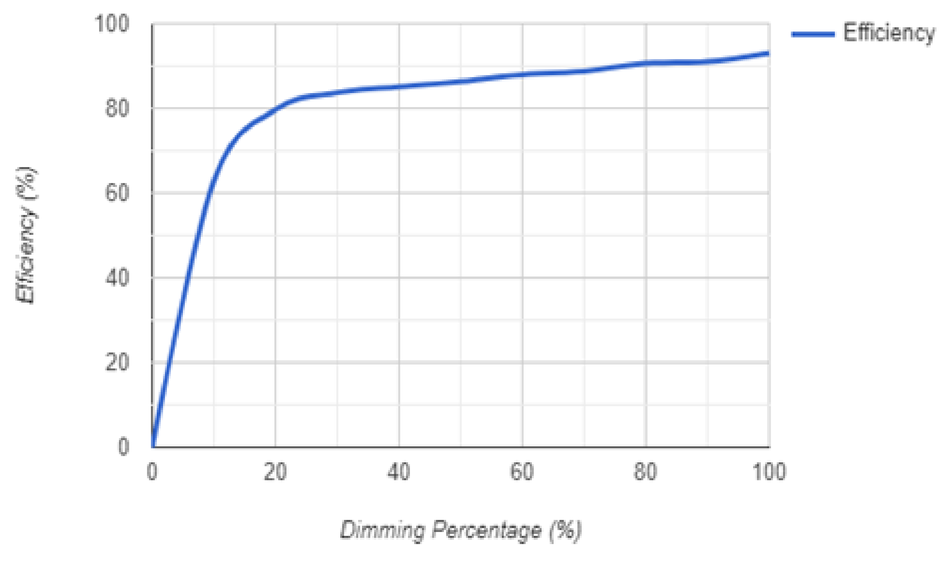


Figure 2:

nController at 40W (Conditions: Pin = 40W, V out = 36V)

Order Information

nLUMINAIRE driver

Model: CY-NL-DRC100

Description: IP networked lighting driver, POE++ input port, RJ45 enabled / 2 – pole dry contact LED-CC output ports

Model: CY-NL-DRV100

Description: IP networked lighting controller, POE++ input port, 4 – pole dry contact LED-CV output port

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About

nLUMINAIRE

nLUMINAIRE is a PoE Connected Lighting System that uses ethernet cable to transmit DC power and data to efficiently power, monitor, and control LED light fixtures. It reduces installation and operating costs and lowers carbon footprint while enhancing safety and security. By implementing this elegant lighting system, both commercial and industrial buildings are becoming smarter and more sustainable.

Learn More

To learn more about nLUMINAIRE visit www.cabsy.com