



# Ldrive 36W

Constant Current Wattage Selectable  
Tunable LED Driver



## Product Overview

Ldrive 36W is a dual-channel constant current LED driver with selectable output current. It is a part of the Lumos Controls ecosystem, comprising controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards. The device can be configured, commissioned, and controlled from any mobile device super-quick and can connect to the Lumos Controls cloud for data analytics.

The device operates on 120-277V AC input voltage range has a maximum output power of 36W. This high efficiency driver protects from short circuit, overload, no-load and surge.

The ecosystem is listed by the **Design Lights Consortium (DLC)**, qualifying it for energy conservation incentive programs and rebates by utility companies.

## Specifications

### Electrical

Specifications	Value	Remarks
Rated supply voltage	120-277VAC	
Max supply voltage	108-305VAC	
Mains frequency	50-60Hz	
Max input current	0.35A	
Leakage current	<450	
Max output power	33.2W	
Typical efficiency	85%	120VAC/50Hz/full load
Power factor	0.95	120VAC/50Hz/full load
Output current	450-800mA	800/700/550/450 Adjusted by dip switch
Output current tolerance	±7.5%	
Output voltage	42VDC	
Output voltage range	27-42VDC	
THD	<15%	120VAC/50Hz/full load
Turn on delay	<500ms	
Inrush current	13.16A	13.16A/112us 277V, 50Hz, Full load

## Features

- Configurable output current using dip switches
- Tunable LED outputs
- BLE 5.2 based non-flooding intelligent communication
- 0-10V input and 12V auxiliary output for sensor integration
- Over load, short circuit, no-load, temperature protection and surge protection
- Zero downtime Over-the-Air (OTA) firmware updates

Specifications	Value	Remarks
Output LF current ripple	±5%	120VAC, Full load
Burst protection voltage	1kV	@Line/Neutral to Earth
Surge transient protection	3kV	@Line to Neutral
	6kV	@Line/Neutral to Earth
Dimming range	0-100%	1000 steps resolution
Dimming curve	linear (default) /logarithmic	

### Bluetooth

Specifications	Value	Remarks
Frequency range	2402-2480MHz	
Max output power	8dBm	Conductive
Receive sensitivity	-95dBm	
Connection distance (device to device)	45m(147.6ft)	Vary depending on the Installation environment

## Environmental

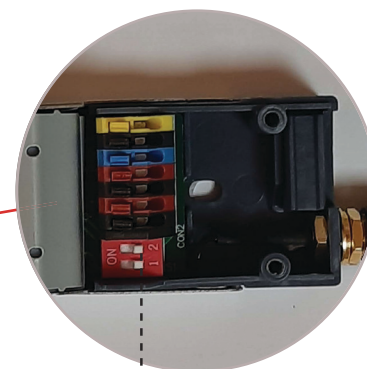
Specifications	Value	Remarks
Operating temperature	-20 to 45°C (-4 to 113°F)	@Life-time 50,000h
Storage temperature	-20 to 80°C (-4 to 176°F)	
Case temperature	80°C (176°F)	
Relative humidity	5-85%	
Lifetime	50,000h	@50°C
IP rating	IP20	Indoor use only

## Mechanical

Specifications	Value	Remarks
Dimension	324 x 30 x 21mm (12.8 x 1.2 x 0.8inch)	L x W x H
Weight	220g(7.760oz)	
Case material	Galvanized sheet (Metal)	White
Flammability rating	UL 94V-0	

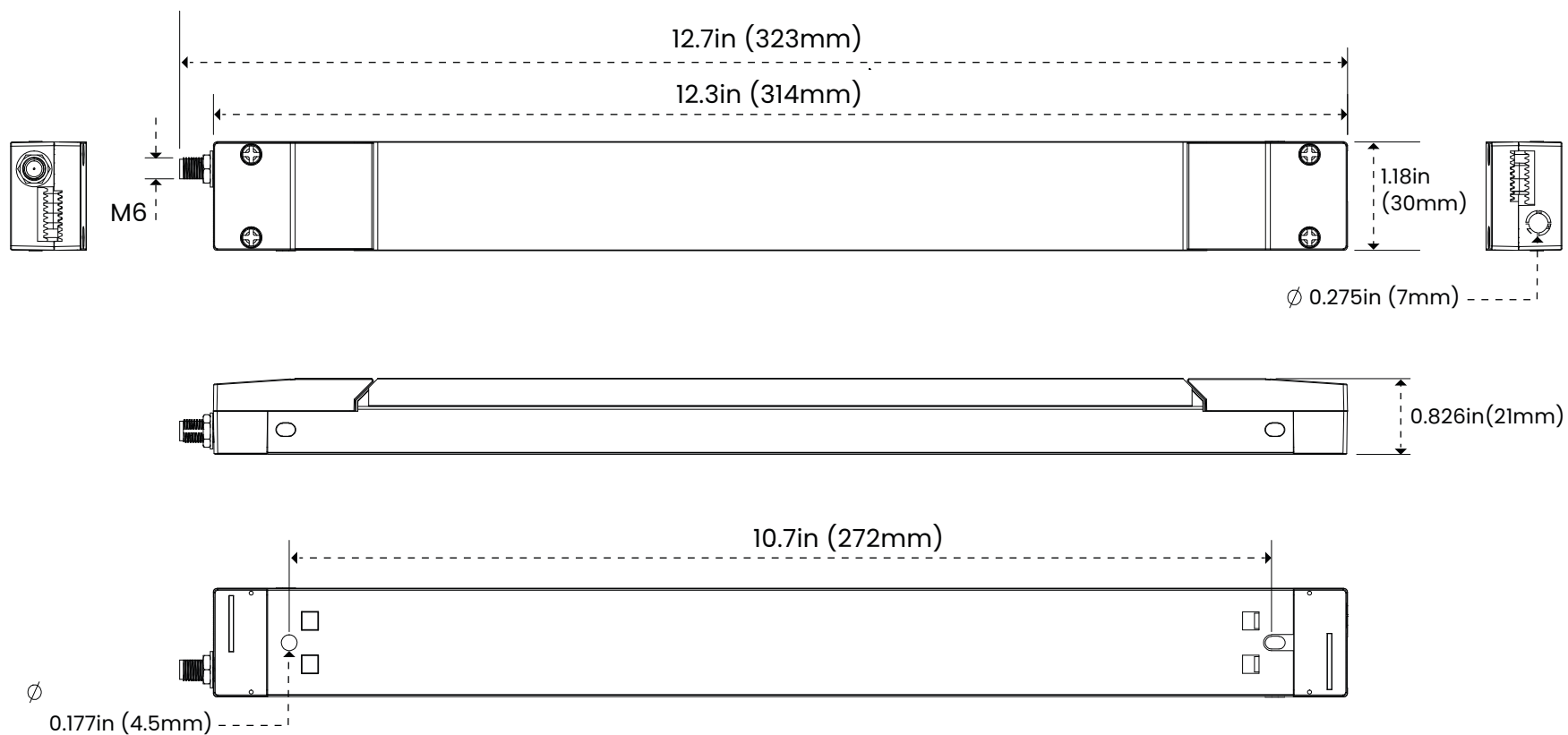
## Output Current Setting Using Dip Switch

Max Output Power	Output Voltage	Output Current	Status of Dip Switch	
			1	2
19W	27-42V	450mA	ON	ON
23W		550mA		ON
29W		700mA	ON	
33W		800mA		



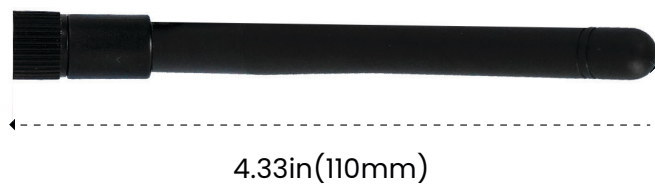
-- Dip Switch

## Product Dimensions



## Antenna Information

### Stick antenna



Antenna Properties	
Frequency range	2.4GHz-2.5GHz
Impedance	50 $\Omega$
VSWR	$\leq 1.8$
Return loss	$\geq 12\text{dB}$
Gain(peak)	2dBi
Power handling	10W
Polarization	Vertical
Radiation pattern	Omni-directional

*\*Wire antenna option available. Please contact sales*

130mm wire antenna



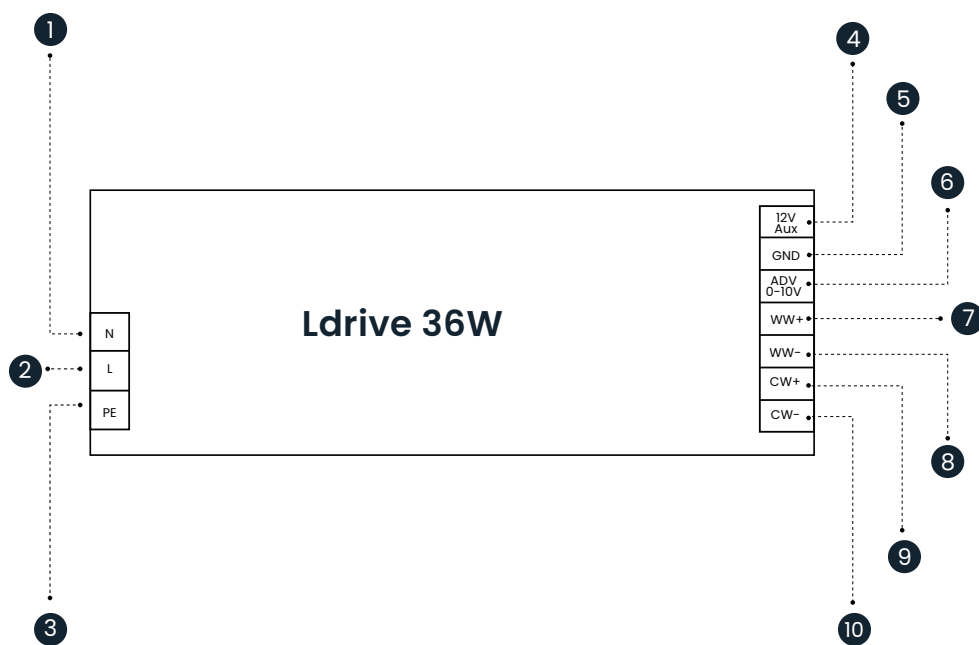
600mm wire antenna



### Antenna Properties

Frequency range	2.4GHz-2.5GHz
Impedance	50 $\Omega$ Nominal
VSWR	1.92:1 Max
Return loss	-10dB Max
Gain (Peak)	2dBi
Cable loss	0.3dBi Max
Polarization	Linear Vertical

## Connector Description



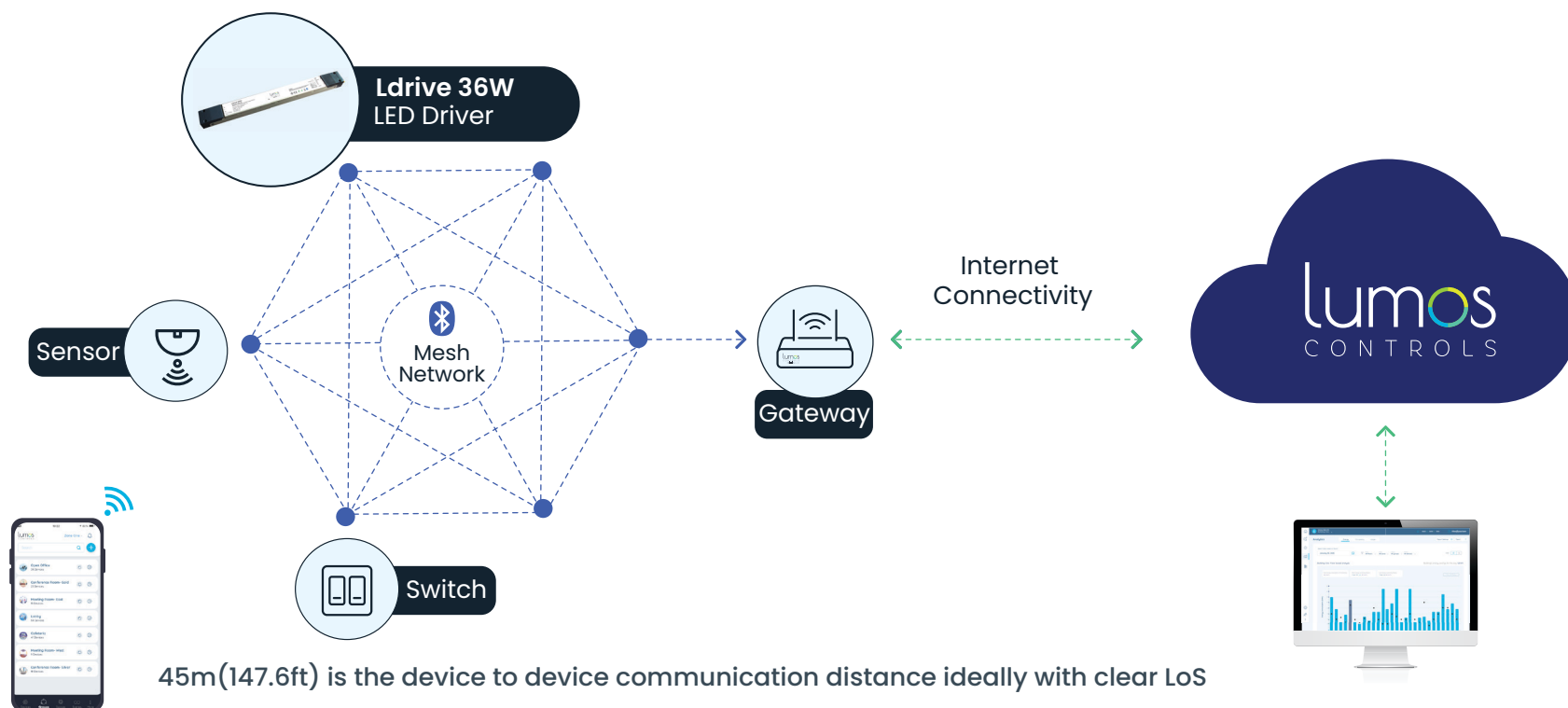
Pin	Symbol	Color	Description
1	N	White	AC Input Neutral
2	L	Black	AC Input Line
3	PE	Green	Earth
4	12V Aux	Yellow	12V Auxiliary Output
5	GND	Black	Common Ground
6	ADC(0-10V)	Blue	0-10V Sensor Input
7	WW+	Red	Warm White +
8	WW-	Black	Warm White -
9	CW+	Red	Cool White+
10	CW-	Black	Cool White-

## Wiring

The wiring can be in stranded wires with ferrules or solid with a cross section of 15-18AWG(1.6-0.8mm<sup>2</sup>)(AC) and 20-22AWG(0.5-0.3mm<sup>2</sup>)(DC). Strip 8.5-9.5mm(0.33-0.37in) of insulation from the cables to ensure perfect operation of the push-wire terminals. Use one wire for each terminal connector.



## Smart Ecosystem



Certifications (in progress)	Details
<b>CE</b>	Article 3, RED 2014/53/EU EMC test standards Safety test standard Radio test standard Health test standard
<b>cULus</b>	Standards: UL 8750(Class P)
<b>FCC</b>	ID: 2AG4N-WDA2CS-36W-IDLN
<b>RoHS 2.0</b>	RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
<b>REACH</b>	Regulation (EC) No 1907/2006 of REACH
<b>WEEE</b>	Under the WEEE Directive: 2012/19/EU
<b>Bluetooth</b>	Declaration ID: D059551

## Items included in the package box

- Ldrive 36W
- User manual
- Stick antenna
- Screws
- Strain relief

## Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating	Output Power	Output Channel
WDA2CS-36W-IDLN	Ldrive 36W	Multi-channel programmable constant current LED driver	BLE5.2	120-277V AC	33.2W	2 Channels for intensity & CCT

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by WiSilica Inc. is under license. Other trademarks and trade names are those of their respective owners.



20321 Lake Forest Dr D6  
Lake Forest, CA 92630

 [www.lumoscontrols.com](http://www.lumoscontrols.com)

 +1 949-397-9330