



# Ldrive 60W

Constant Current Wattage Selectable  
Tunable LED Driver



## Product Overview

Ldrive 60W 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 60W. 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	0.54A	
Leakage current	<450	
Max output power	52.5W	
Typical efficiency	87%	120VAC/50Hz/full load
Power factor	0.95	120VAC/50Hz/full load
Output current	900-1250mA	1250/1100/1050/900 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

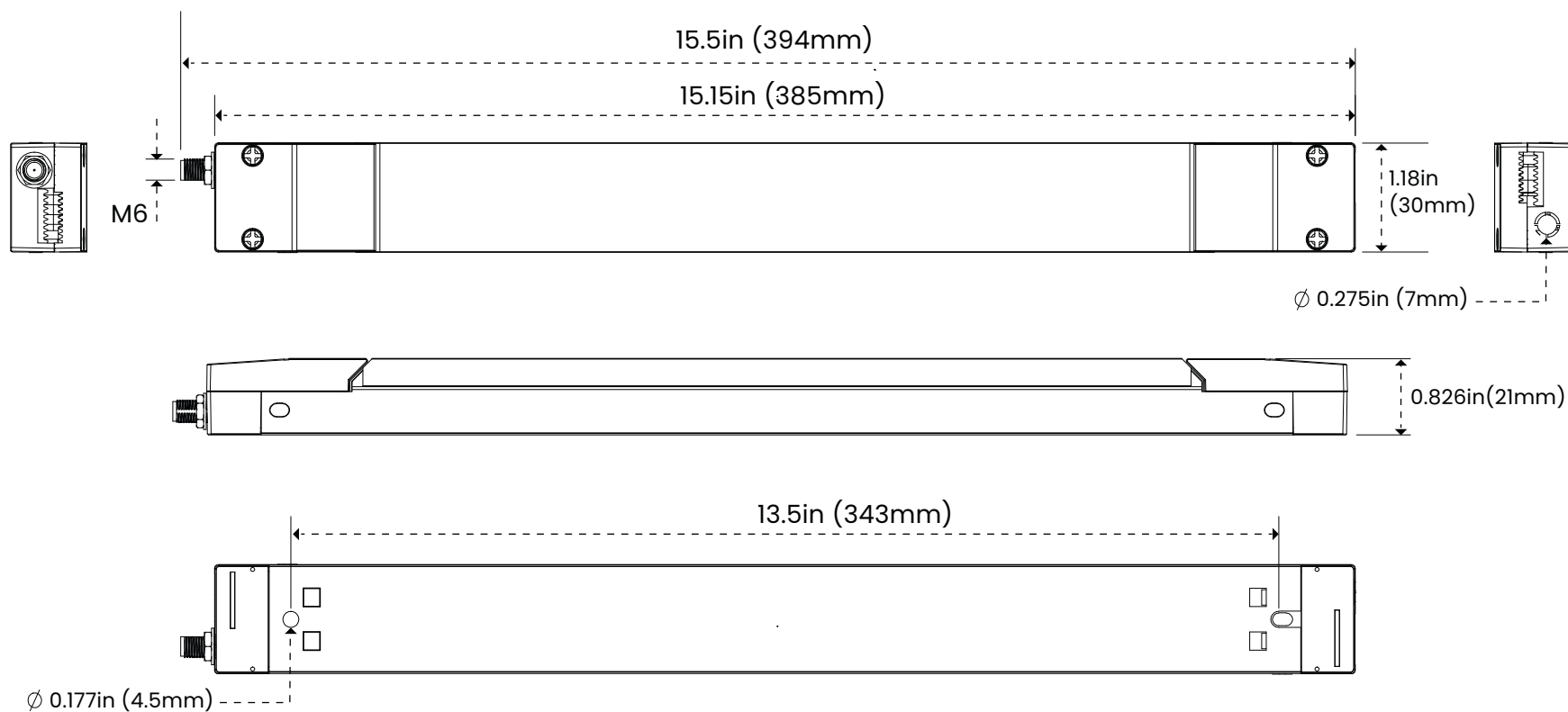
Specifications	Value	Remarks
Dimension	394 x 30 x 21mm (15.5 x 1.18 x 0.82inch)	L x W x H
Weight	300g(10.6oz)	
Case material	Galvanized sheet (Metal)	White
Flammability rating	UL 94V-0	

## Output Current Setting Using Dip Switch

Max Output Power	Output Voltage	Output Current	Status of Dip Switch	
			1	2
40W	27-42V	900mA	ON	ON
44W		1050mA		ON
46W		1100mA	ON	
53W		1250mA		

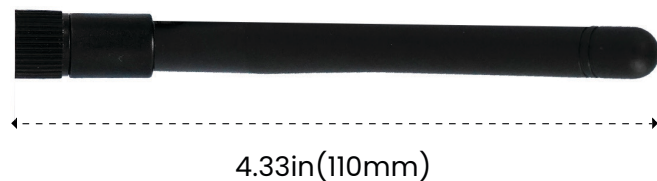


## Product Dimensions



## Antenna Information

Stick antenna



Antenna Properties	
Frequency range	2.4GHz-2.5GHz
Impedance	50 $\Omega$
VSWR	$\leq 1.8$
Return loss	$\geq 12$ 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



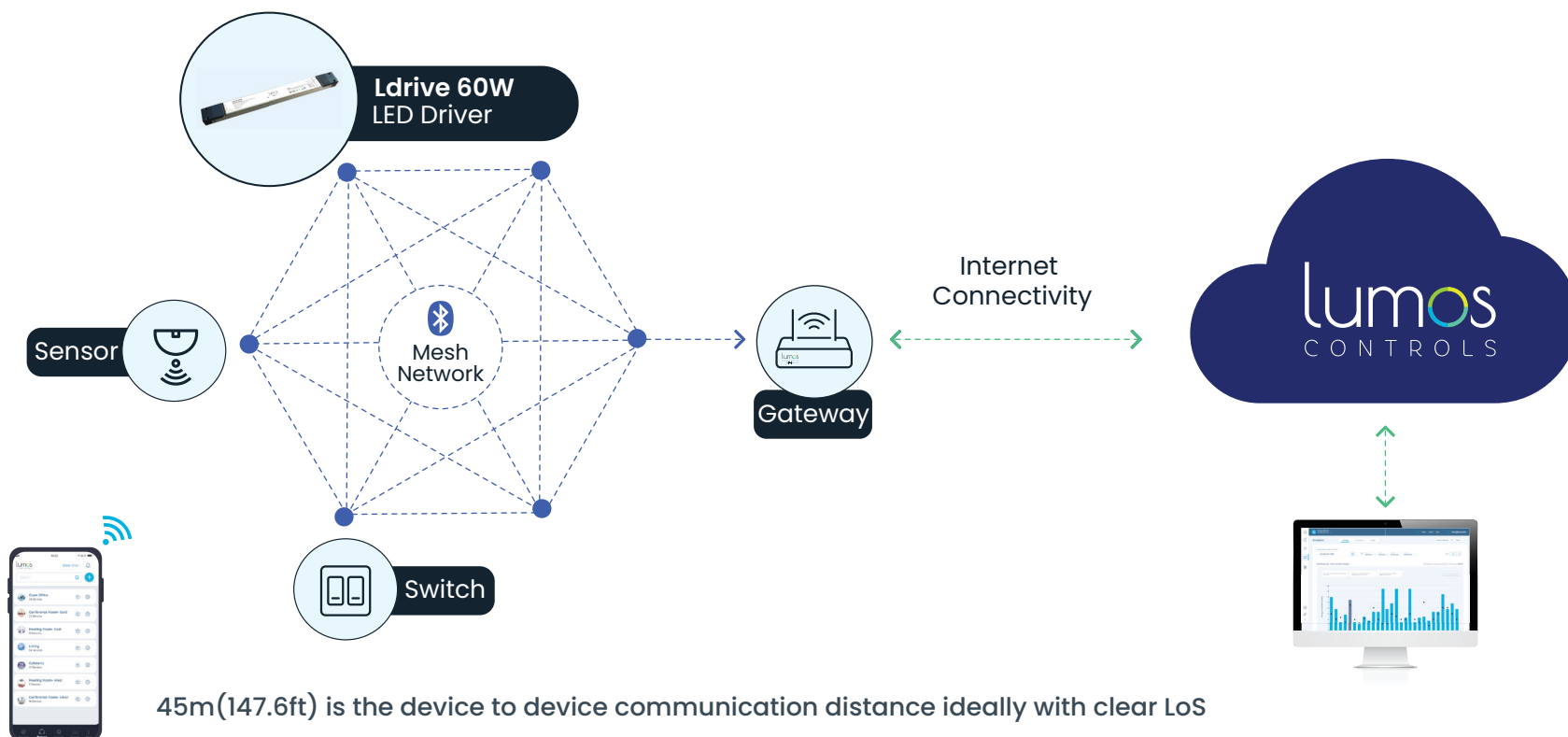
Pin	Symbol	Color	Description
1	N	White	AC Input Neutral
2	L	Black	AC Input Line
3	PE	Green	Earth
4	12V Aux	Yellow	12V Auxiliary Output
5	GND	Black	Common Ground
6	ADC(0-10V)	Blue	0-10V Sensor Input
7	WW+	Red	Warm White +
8	WW-	Black	Warm White -
9	CW+	Red	Cool White+
10	CW-	Black	Cool White-

## 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-60W-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 60W
- User manual
- Stick antenna
- Screws
- Strain relief

## Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating	Output Power	Output Channel
WDA2CS-60W-IDLN	Ldrive 60W	Multi-channel programmable constant current LED driver	BLE5.2	120-277V AC	52.5W	2 Channels for intensity & CCT

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