

Ldrive 14W

Constant Current Wattage Selectable
Tunable LED Driver



Product Overview

Ldrive 14W 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 220-240VAC input voltage range has a maximum output power of 14W. 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	220-240 VAC	
Max supply voltage	198-264 VAC	
Mains frequency	50-60Hz	
Max input current	0.11A	230V, 50Hz, Full load @350mA output current
Max input power	16.8W	230V, 50Hz, Full load @350mA output current
Typical power consumption	1.35W	230V, 50Hz, No load
Max output power	14W	
Typical efficiency	85%	230V, 50Hz, Full load @350mA output current
Power factor	0.95	230V, 50Hz, Full load @350mA output current
Output current	180-350mA	Adjusted by dip switch
Output current tolerance	±7.5%	
Max output voltage	50VDC	
Output voltage range	8-40VDC	
THD	<15%	230V, 50Hz, Full load @350mA output current

Features

- Selectable constant LED current through dip switch
- High efficiency >85% and low THD <15%
- Power factor greater than 0.95
- Overload, short circuit, no load and surge protection
- BLE 4.2 based non-flooding intelligent communication
- Zero downtime Over-the-Air (OTA) firmware updates

Specifications	Value	Remarks
Output LF current ripple	±5%	<120Hz
Turn on delay	<1s	230V, 50Hz, Full load
Inrush current	16.65A	98us
Burst protection voltage	1kV	

Bluetooth

Specifications	Value	Remarks
Frequency range	2402-2480MHz	
Max output power	7dBm	
Receive sensitivity	-92dBm	
Connection distance (device to device)	45m(147.6 ft)	Vary depending on the installation environment

Environmental

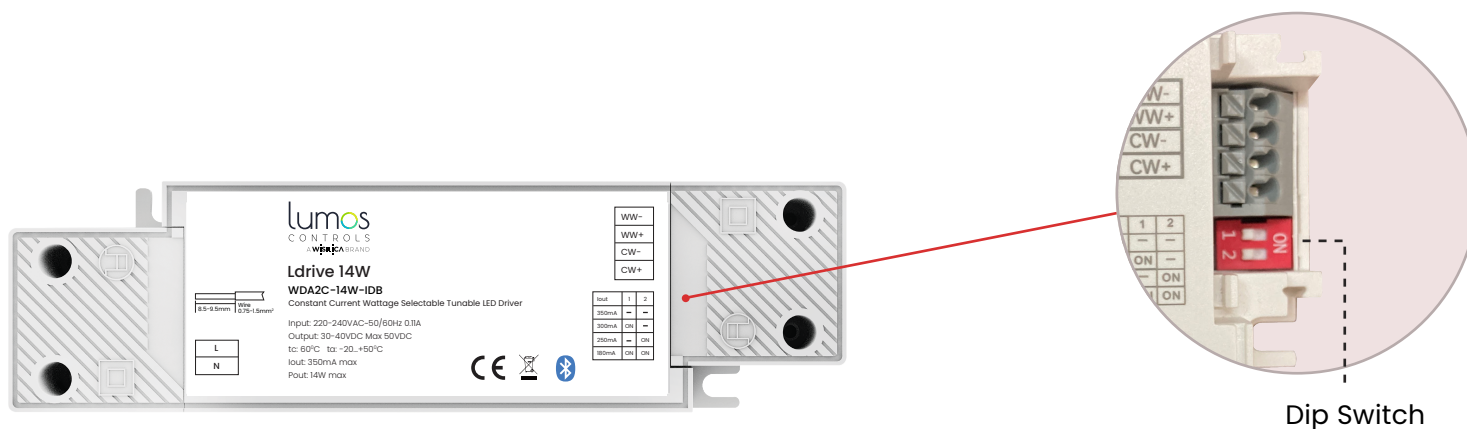
Specifications	Value	
Operating temperature	-20 to 50°C (-4 to 122°F)	@Life-time 50,000h
Case temperature	80°C (176°F)	
Storage temperature	-40 to 80°C (-40°F to 176°F)	
Relative humidity	5-85%	
Lifetime	30,000h	@50°C
IP rating	IP20	Indoor use only

Mechanical

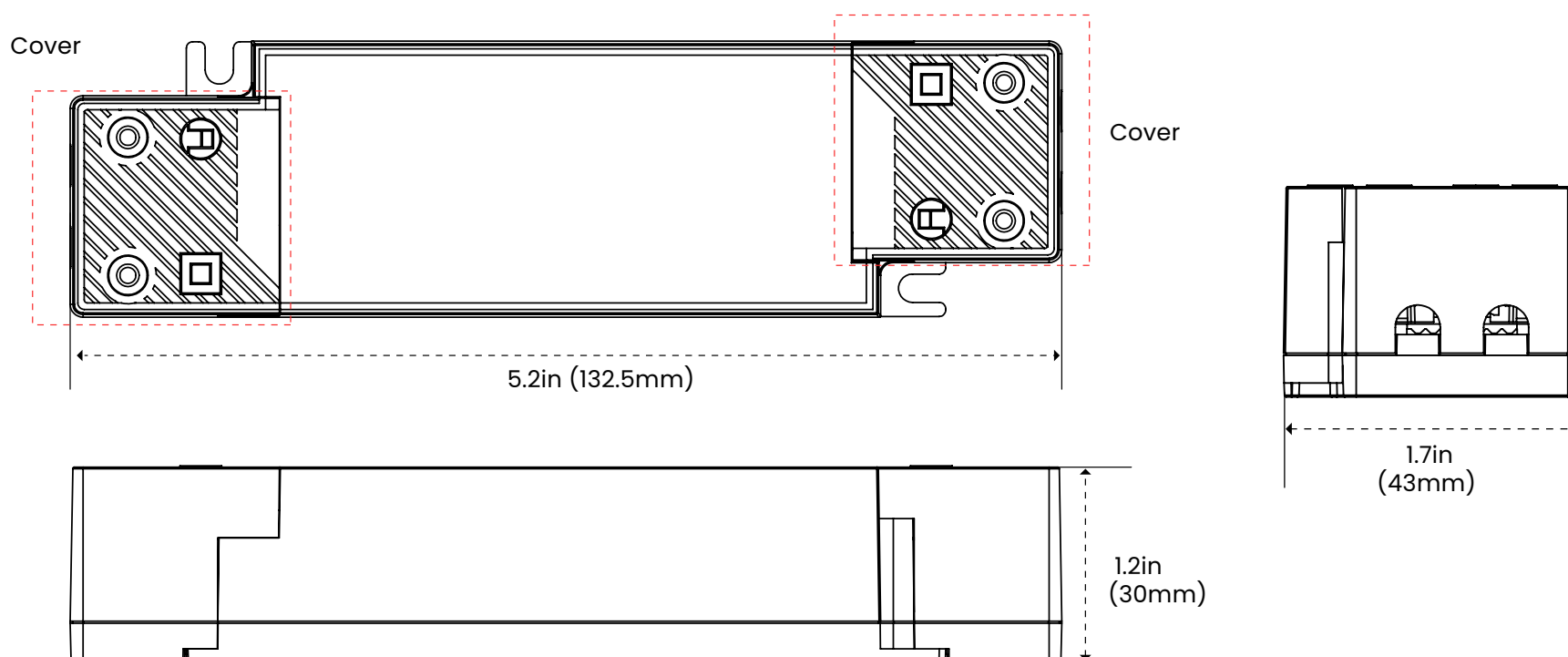
Specifications	Value	Remarks
Dimension	5.2 x 1.7 x 1.2in (132.5 x 43 x 30mm)	L x W x H
Weight	202.3g (7.135oz)	
Case material	Polycarbonate	White
Flammability rating	UL 94 V-0	

Output Current Setting Using Dip Switch

Max Output Power	Output Voltage	Output Current	Status of Dip Switch	
			1	2
7W	8-40VDC	180mA	ON	ON
10W		250mA		ON
12W		300mA	ON	
14W		350mA		



Product Dimensions



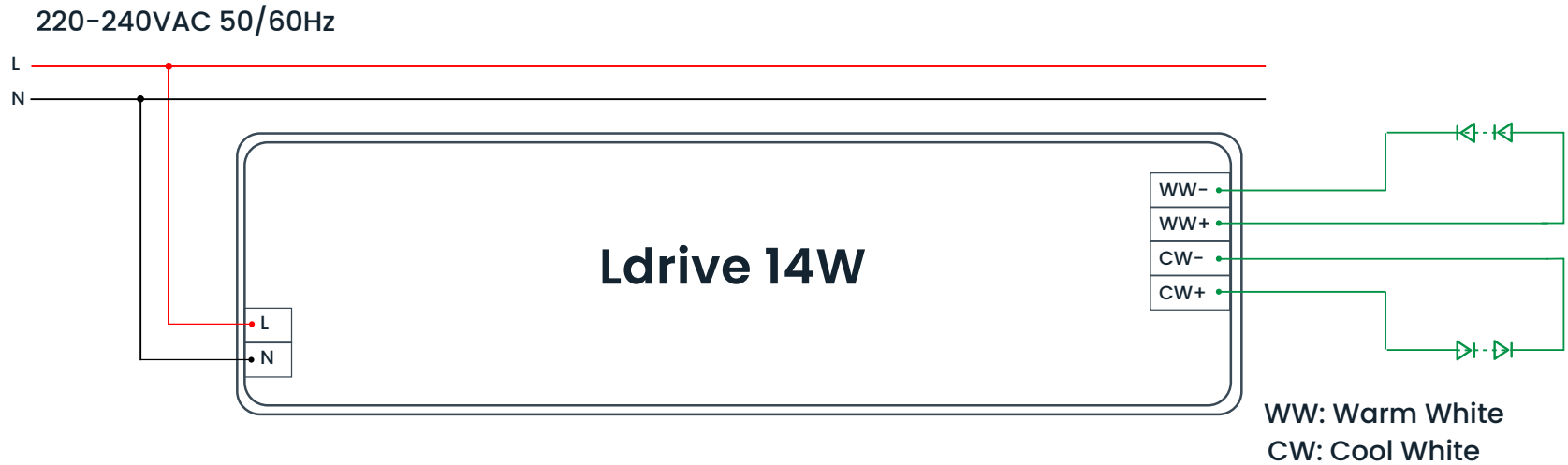
Connector Description



Pin	Symbol	Description
1	L	AC Input Line
2	N	AC Input Neutral
3	WW-	Warm White-
4	WW+	Warm White+
5	CW-	Cool White-
6	CW+	Cool White+

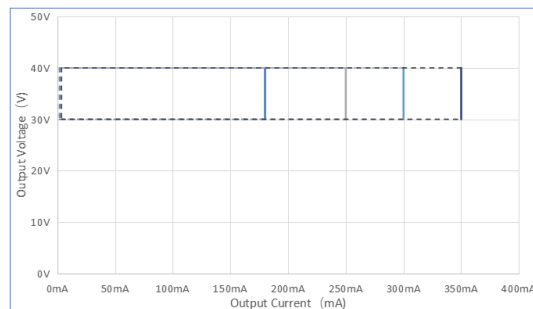
Wiring

The wiring can be in stranded wires with ferrules or solid with a cross section of 16-18AWG (0.75-1.5sq.mm). Strip 8.5- 9.5 mm of insulation from the cables to ensure perfect operation of the push-wire terminals. Use one wire for each terminal connector.

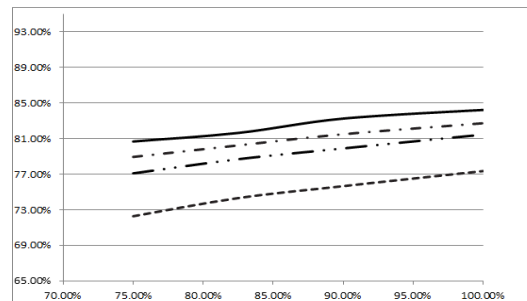


Electrical Values

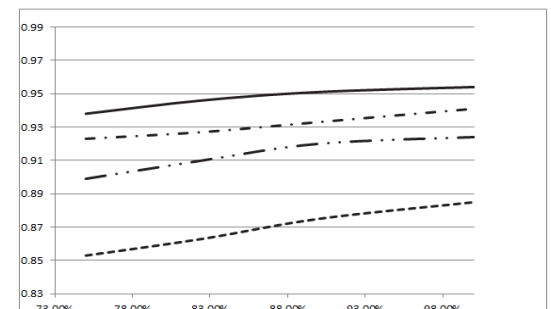
Operating window



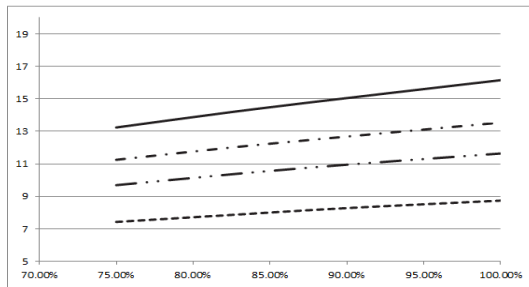
Efficiency vs load (@230VAC 50Hz)



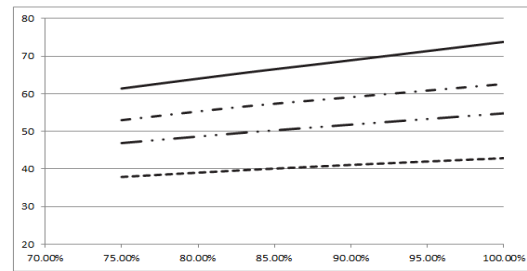
Power factor vs load (@230VAC 50Hz)



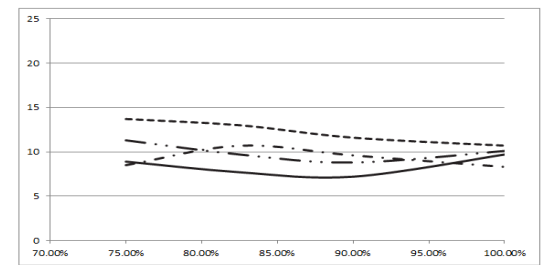
Input power vs load (@230VAC 50HZ)



Input current vs load (@230VAC 50HZ)

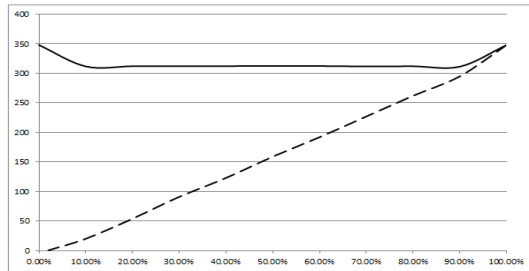


THD vs load (@230VAC 50HZ)



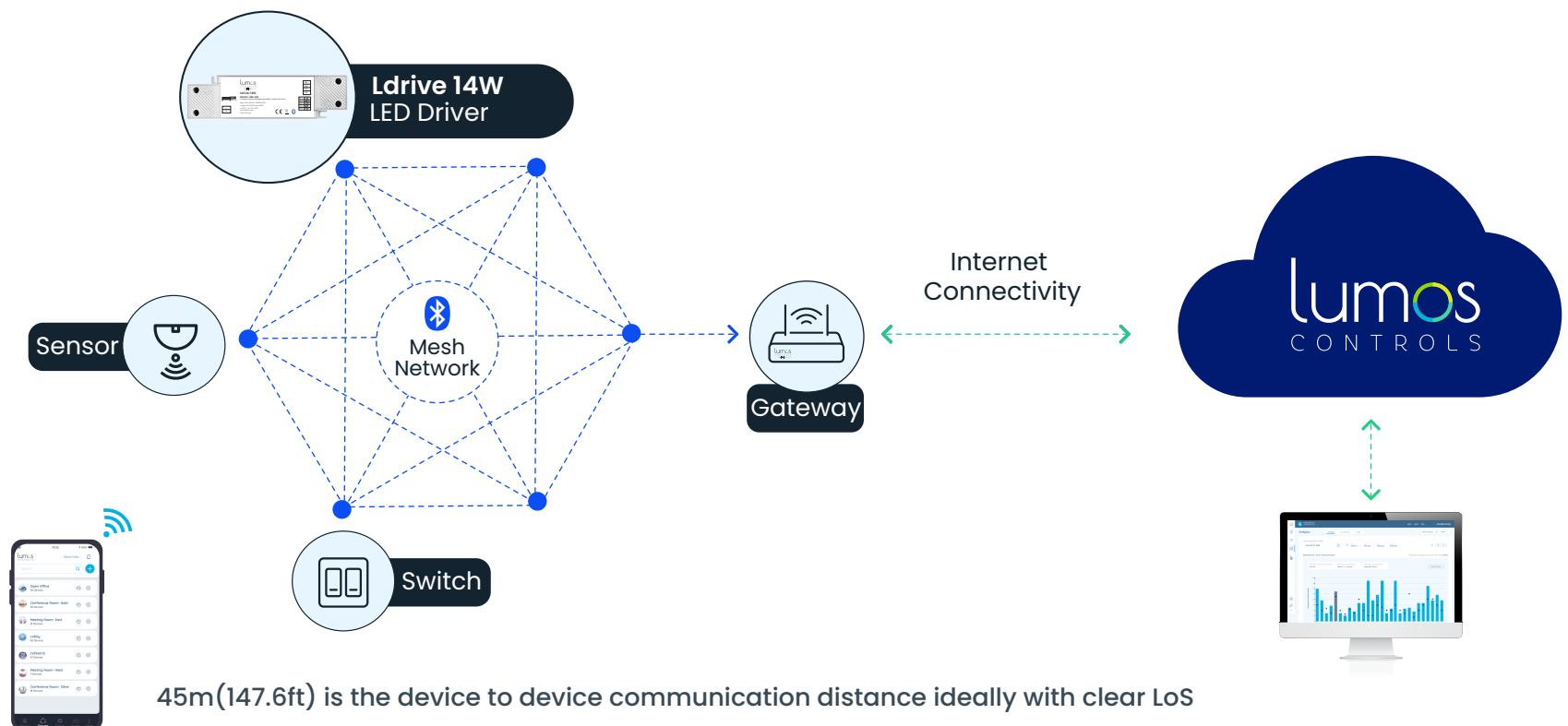
——— 350mA ····· 250mA
 - · - · - 300mA - - - - 180mA

Dimming characteristics



——— Color modulation
 - - - - Dimmable

Smart Ecosystem



Certifications	Details
CE	<p>Article 3, RED 2014/53/EU</p> <p>EMC test standards ETSI EN 301 489-1 V2.2.3(2019-11) ETSI EN 301 489-17 V3.2.4(2020-09) EN 55032: 2015/A11: 2020 EN 55035: 2017+A11: 2020</p> <p>Safety test standard EN 61347-2-13:2014+A1:2017 EN 61347-1:2015+A1:2021 EN IEC 60598-1:2021 EN 62493:2015</p> <p>Radio test standard ETSI EN 300 328 V2.2.2 (2019-07)</p> <p>Health test standard: EN 62479: 2010 EN 50663: 2017</p>
Bluetooth	Declaration ID: D039950

Items included in the package box

- Ldrive 14W
- User manual
- Screws
- Strain relief



Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating	Output Power	Output Channel
WDA2C-14W-IDB	Ldrive 14W	Constant current wattage selectable Tunable LED Driver 14W	BLE4.2	220-240VAC	14W	2 Channels

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