



SPEC SHEET: WAVELUX INDOOR/OUTDOOR SLIMLINE DIMMABLE LED DRIVER 60W

The Wavelux Indoor/Outdoor Slimline Dimmable 60W LED Driver is a 5 in 1 dimmable LED power supply. The universal dimmable driver allows for a full 0-100% dimming range, flicker-free output that is compatible with forward and reverse phase, PWM, Triac, MLV, ELV, and 0-10V Dimming. This driver has a universal input of 100-277V AC with a built-in active Power Factor of ≥ 0.95 , and efficiency up to 86%. The added safety protections like short circuit, overload, over temperature and a fan-free cooling waterproof (IP66) design means you can use this safety in many environments; including dry (indoors), damp and wet locations (outdoors). Ideal for commercial buildings, artistic installations, stage performances, residential, signage, retail and more, this driver is your all-in-one contractor grade LED Strip power supply and driver with an ultra-high frequency, flicker-free performance, and fan-free design for a quiet, reliable operation. Works with all Pixel-Free LED and Wavelux LED Products, among most other LED Strip lights. This robust design offers a 5-yr warranty.



Class 2

Class P

TYPE HL

SELV



RoHS



Model		KVG-12060-DWL	KVG-24060-DWL		
Certificate		UL / cUL / FCC / Class 2 / CE / ROHS / Reach			
Output	DC Voltage	12V	24V		
	Voltage Tolerance	$\pm 0.5V$			
	Voltage Regulation	$\pm 0.5\%$			
	Rated current	5A	2.5A		
	Rated power	60W			
	Load Regulation	$\pm 2\%$	$\pm 1\%$		
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor@ full load	0.99@120VAC	0.987@277VAC		
	THD(Typ.) @ full load	<10%@120VAC	<15%@277VAC		
	Efficiency(Typ.) @ full load	84%@120VAC	86%@277VAC	83%@120VAC	85%@277VAC
	AC Current (Max.)	0.9A			
	Inrush Current (Typ.)	11A,1ms@120VAC	27A ,1.08ms@277VAC		
	Leakage current	<0.5mA			
Protection	Short Circuit	Shut down o/p voltage, recovers automatically after fault condition is removed			
	Over Load	$\leq 120\%$ Hiccup mode, recovers automatically after fault condition is removed			
	Over temperature	100°C $\pm 10^\circ C$ shut down o/p voltage, automatically recover after cooling			

COMPANY	PROJECT	AREA	APPROVED BY	DATE

Environment	Working TEMP.	-40~+60°C (see below derating curve)
	Working Humidity	20 - 95%RH non-condensing
	Storage TEM.,Humidity	-40 - +80°C, 10 - 95% RH non-condensing
	TEMP.coefficient	±0.03%/°C (0 - 50°C)
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes
Safety & EMC	Safety standards	UL8750 UL1310 CAN/CSA-C22.2 No.250.13(US)
	Withstand voltage	I/P-O/P:1.8KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC (US)
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25°C / 70% RH
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B(US)
Others	Net Weight	0.349Kg
	Dimension	300.6*32*20mm(L*W*H)
	Packing	290*270*160mm 30pcs /CTN 11.415KG/CTN
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .	

DESIGN

SIZE: 300.6 x 32 x 20mm

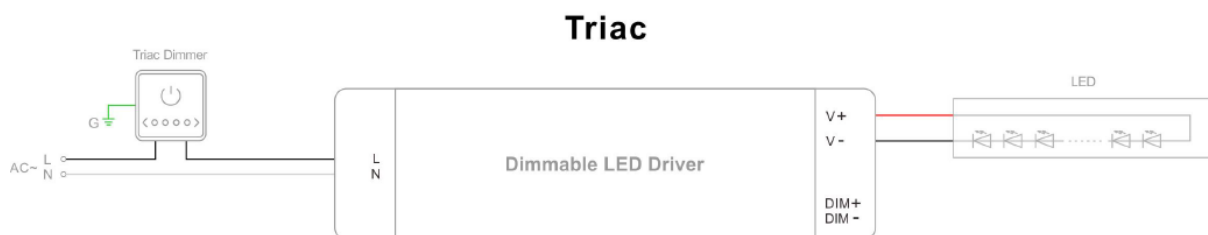


Power Supply features fan-less finned weather resistant IP66 casing for indoor/outdoor grade. Comes with mounting holes for easy installation which can be mounted horizontally or vertically.

WIRING DIAGRAM

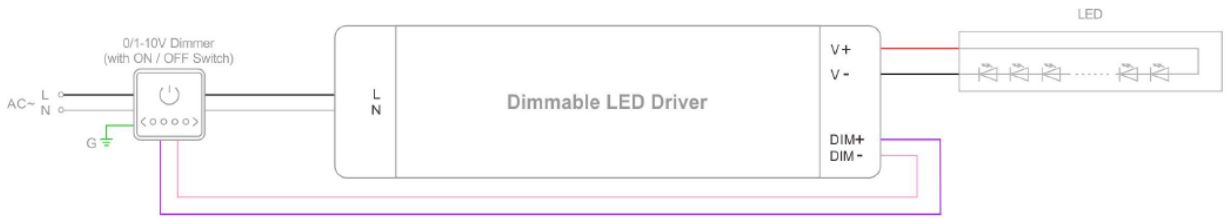
METHOD 1: TRIAC/Phase Cut Dimming

1. The Pulse-Width Modulation (PWM) of the output voltage can be adjusted through input terminal of the AC Phase Line (L) by connecting a Phase/TRIAC dimmer or lighting system.
2. Dimmer works with most Forward Phase (MLV), Reverse Phase (ELV), TRIAC dimmers or lighting systems.
3. Min load is 10% of total output power
4. Use dimmer with power at least 1.5x the output of the driver (90W)

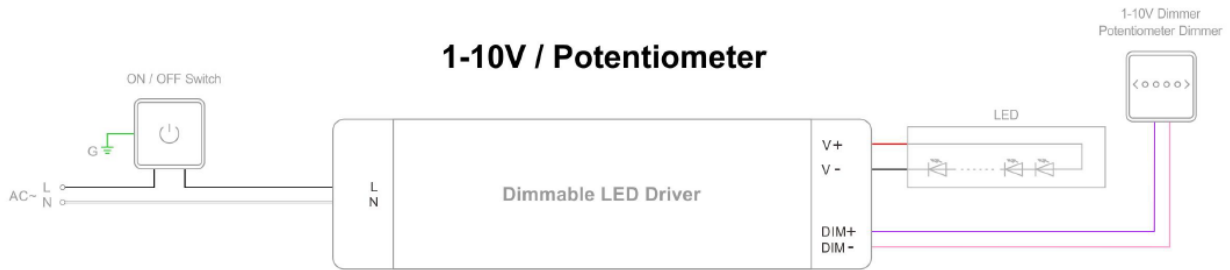


METHOD 2: 0-10V, 1-10V, 10V PWM, Potentiometer Dimming

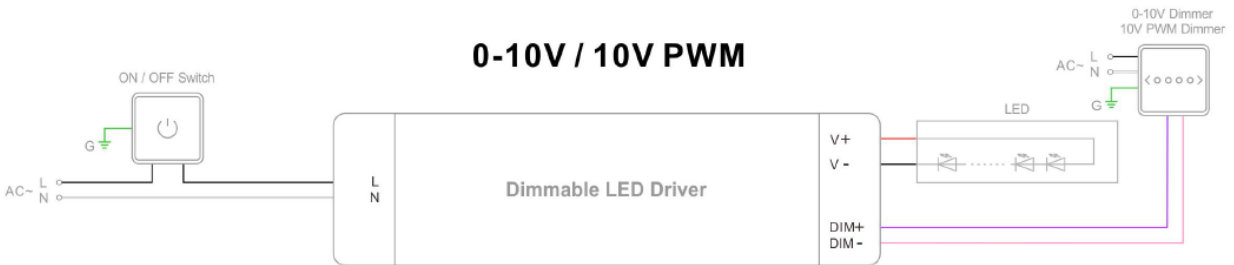
0/1-10V



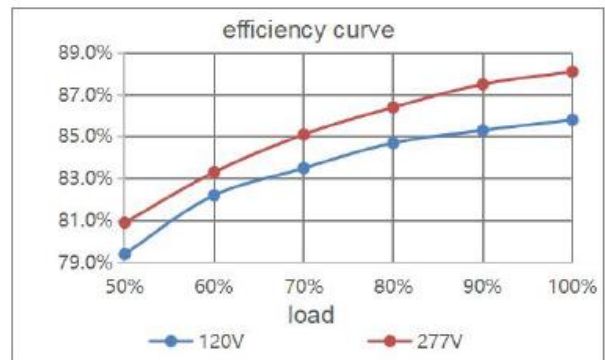
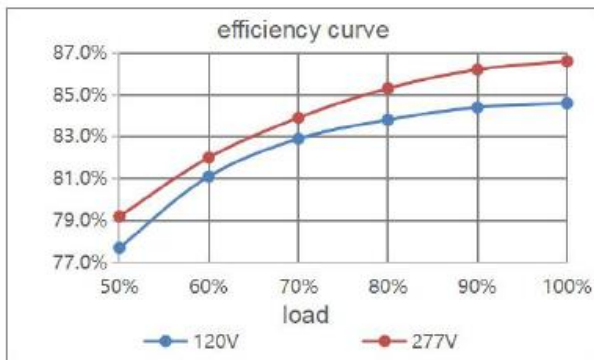
1-10V / Potentiometer



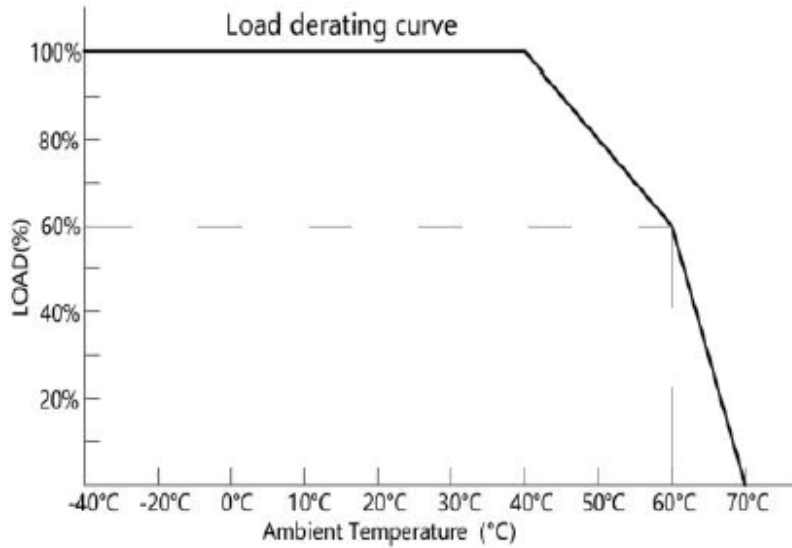
0-10V / 10V PWM



EFFICIENCY CURVE

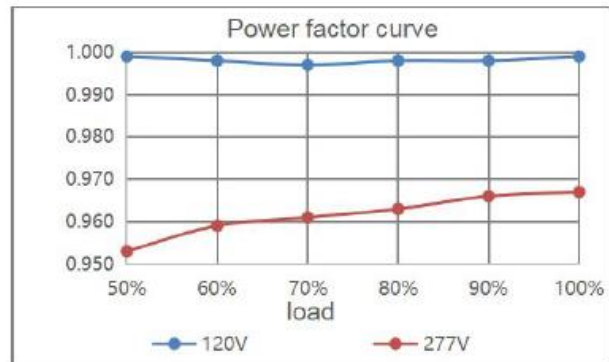
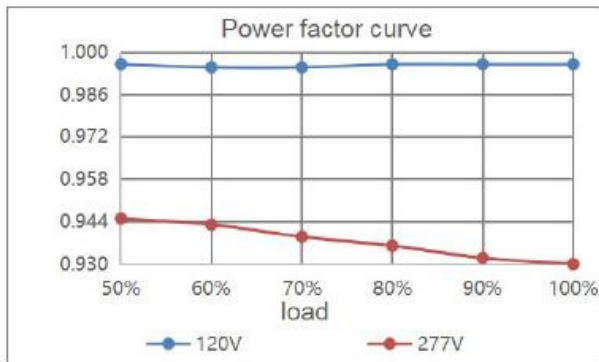


DERATING CURVE

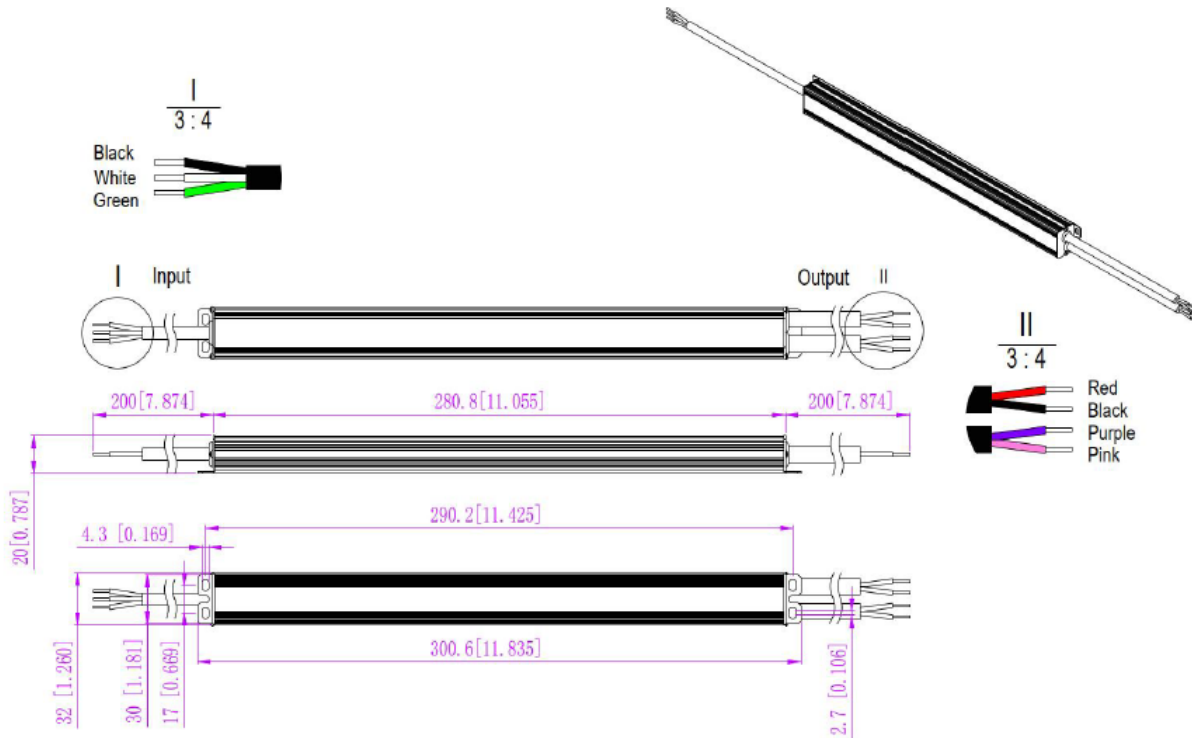


❖ To extend their life, please refer to the Derating Curve and derate according to the temperature.

POWER FACTOR CURVE



MECHANICAL SPECIFICATION



FAQ

Is this capable of being used both indoor and outdoors?

Yes, the rating is IP66 and rated for both indoor and outdoor applications. If encasing into external boxes or structures, make sure to use proper ventilation when using to avoid the power supply overheating.

Will this power supply be suitable for contractor use?

YES! This driver should be the go-to driver in any electrical contractor's bag. It's compatible with most LEDs and wall dimmer switches, has all the certifications most contractors will require (UL, CE, FCC, RoHS, etc).

WARRANTY

This product comes with a 5 year manufacturer warranty.

PRECAUTIONS

- In order to guarantee sufficient voltage is available to drive LED Strip in all conditions, make sure power supply is rated for 20% more than LED Strip consumption.
- For best results, make sure load (LED Strip power consumption) is within 10-80% of this driver
- Do not touch AC Power Supply when powered on
- Polarity Matters! Make sure to wire positive and negative poles of wires during installation to avoid damage to the strip
- Make sure driver is installed with adequate ventilation around it to allow for heat dissipation
- Product is not intended to be submerged and used in swimming pools or hot tubs
- Professional installation recommended