

DUD300IP65 | 300W

Constant Voltage Dimmable LED Driver

5-IN-1 Dimming | Triac/0-10V/1-10V/10V PWM/Potentiometer

Features

- 5-way universal dimming
- Smooth flicker-free dimming, down to 0.1%
- PF>0.95, dimming range: 0.1-100%, flicker-free
- PWM Output: 4000Hz constant frequency
(Different frequencies can be customized: 250-30000Hz)
- Short-circuit, over-temperature, over-load protection
- Super low loading request, works perfect at 10-100% load
- High-quality aluminum housing for dry, damp, wet location
- Build in active PFC, typical power factor >0.95,
THD<10%@120V Max. Load.
- Dimming curve can be customized
- 5-year warranty



NEMA 4X

Type HL

Class P

12V, 24V OR 48VDC

110-277V

Description: Constant voltage dimmable LED driver

Driver Type: LED Driver without junction box

Dimming: 5-way dimming: forward phase (MLV), reverse phase (ELV), 0-10V, PWM, and potentiometer

Dimming Range: 0.1-100%, flicker-free, ultra deep amplitude

Output Dimming Method: PWM, 4000Hz Constant frequency

Flicker: Meets California Title 24 / JA8

Input Voltage: 110-277VAC, 50/60Hz

Output Voltage: DC12V, 24V or 48V

Wattage: 300W

Application: Suitable for dry, damp and wet location

Certifications: UL, FCC

Warranty: 5-Year

Model	Max Power	Output
DUD300IP65-12V	300W	12V
DUD300IP65-24V	300W	24V
DUD300IP65-48V	300W	48V

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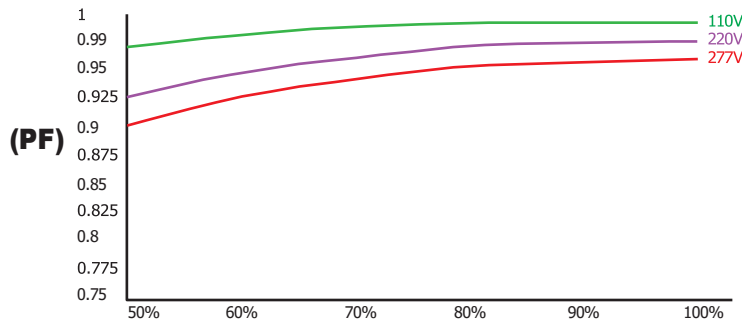
Model Number		DUD300IP65-12V	DUD300IP65-24V	DUD300IP65-48V
Output	Rated Power	300W		
	Rated Voltage	DC12V	DC24V	DC48V
	Rated Current	25A	12.5A	6.25A
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Load Regulation	±1%		
Input	Voltage Range	110-277V		
	Frequency Range	47-63Hz		
	Efficiency (Typ.)	91% @ 120VAC 92% @ 277VAC		
	THD	THD<15% (@100% load)		
	Power Factor (Typ.)	0.99@120VAC 0.98@277VAC		
	AC Current (Typ.)	3.02A		
	Inrush Current (Typ.)	35A		
	Leakage Current	<0.5mA		
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.		
	Overload	Intelligently reduce the output voltage, auto-recovery or re-power on to recovery		
	Over Temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.		
Environment	Working Temp.	Tcase = -40~+140°F (-40~+60℃) (Please refer to "OUTPUTLOAD vs TEMPERATURE" section)		
	Working Humidity	20 ~ 95% RH non-condensing		
	Storage Temp. Humidity	-40~+194°F (-40~+90℃), 10~95% RH		
	Temp. Coefficient	±0.03%/℃ (0~50℃)		
	Vibration	10~500 Hz, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes		
Safety & EMC	Safety Standards	UL8750, Class P		
	Withstand Voltage	I/P-O/P:1.88KVAC		
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH		
	EMC Emission	Compliance to FCC part 15 Subpart B		

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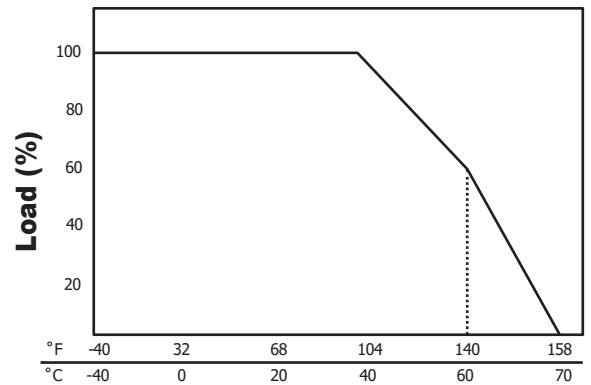
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PFC Load Graph

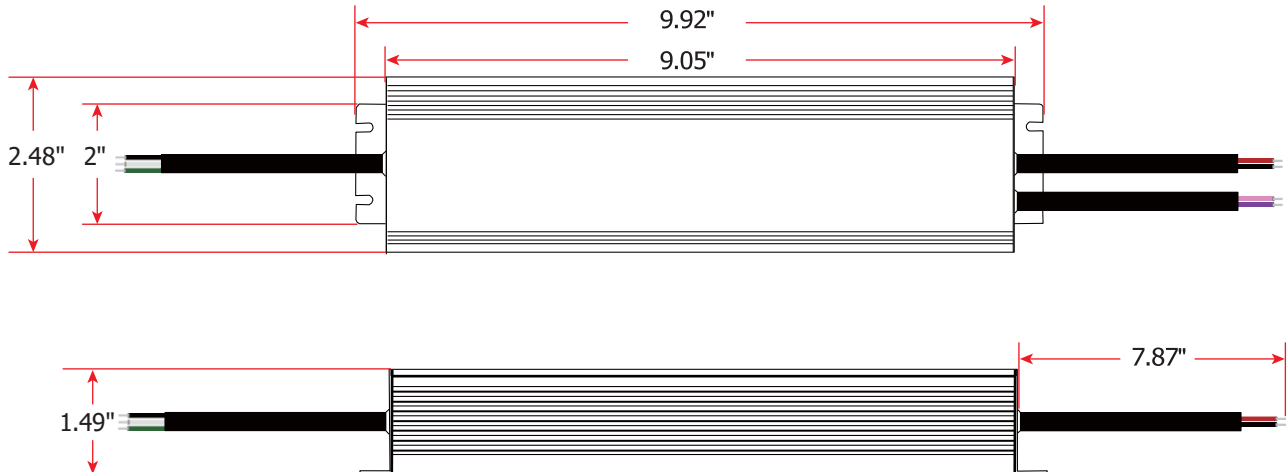


Load vs Ambient Temperature



MECHANICAL DIAGRAMS

Dimension: 252x63x38mm (L*W*H)
9.92"x2.48"x1.49" (L*W*H)



Wire Specification

PMA-A	Input			Output			0/1-10V Dimming		
Power	Function	Color	Spec.	Function	Color	Spec.	Function	Color	Spec.
300W	AC L	Black	18AWG	DC+	Red	12V/14AWG 24V/14AWG 48V/18AWG	Dim+	Purple	18AWG
	AC N	White	18AWG	DC-	Black		Dim-	Pink	18AWG
	Ground	Green	18AWG	/	/	/	/	/	/

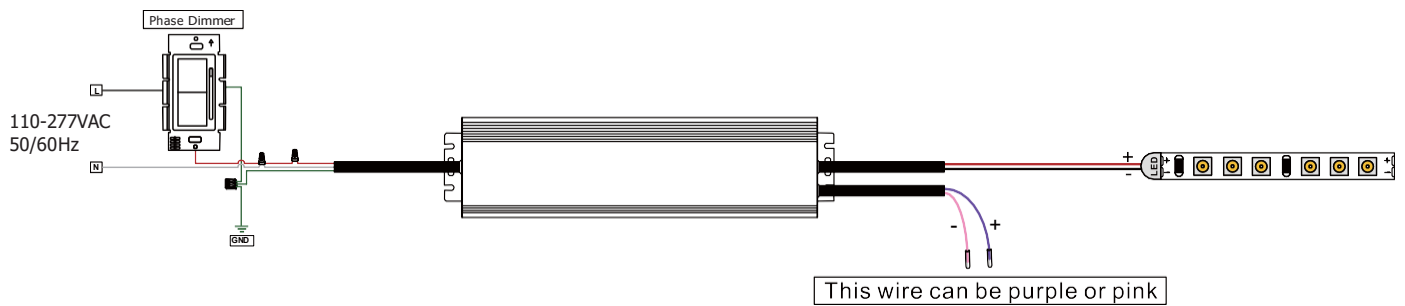
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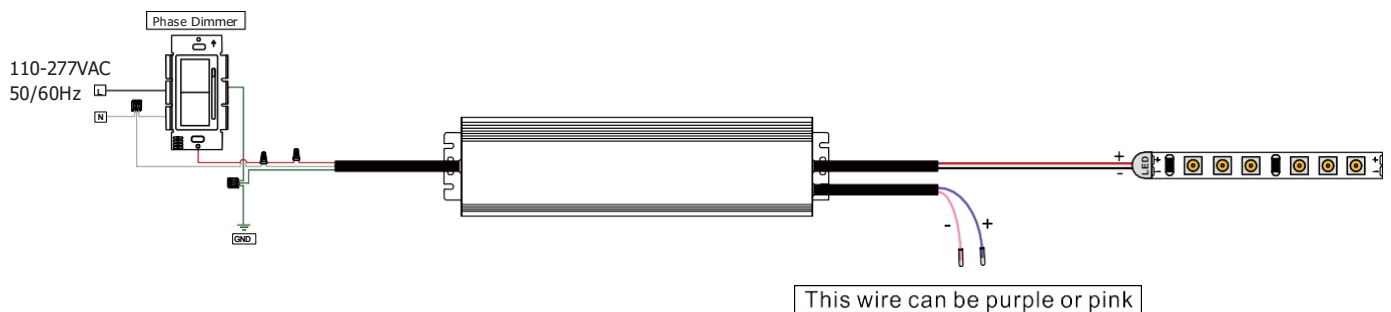
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Wiring Diagram

A. TRIAC/MLV (Leading Edge) Dimmer Wiring Diagram



B. Electronic Low Voltage (ELV) Dimmer Wiring Diagram



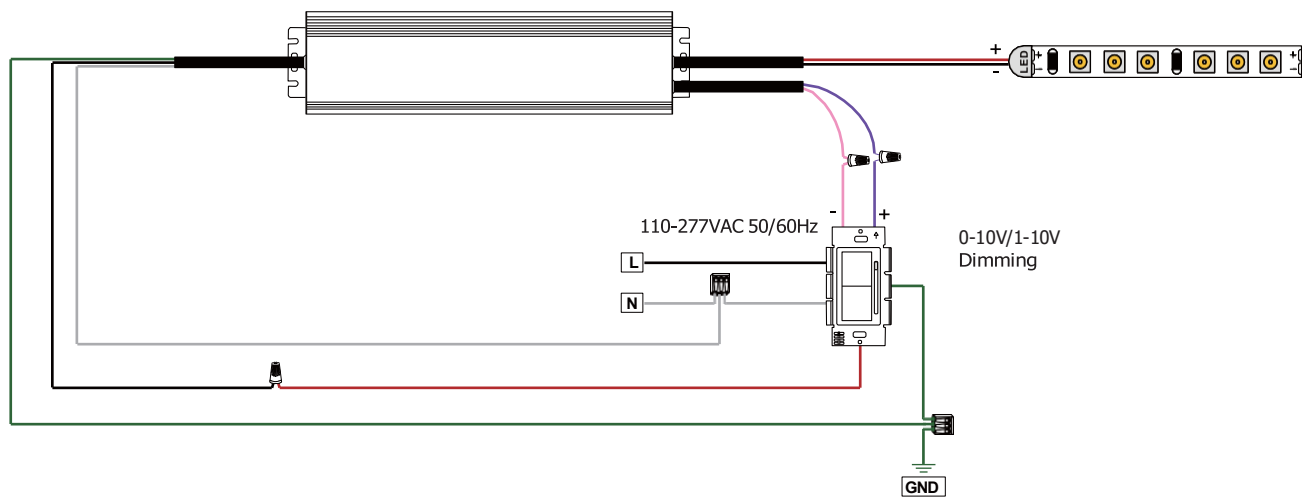
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Wiring Diagram

C.0-10V/1-10V Dimmer Wiring Diagram
(The driver input is connected to the dimmer.)



D.0-10V/1-10V Dimmer Wiring Diagram
(The driver is independently connected to the input.)

