

■ Features

- Power Rating: 320W
- Input Voltage: 108-305Vac
- Constant voltage and constant current design
- Output current (70mA-8880mA)
- Digital programming with external module and software
- Efficiency up to 94%
- Compatible with 0(0.05)-10V, PWM, external resistor, clock, DMX dimming
- Lightning, OVP, SCP, OTP & Open Circuit Protection
- IP67
- 7-year warranty
- Surge Protection: L-N 5.5kV, L/N-Earth 11kV



*Product images are for illustrative purposes only and may vary from actual design.

■ Application

- Outdoor and Indoor LED Lights
- LED lights with flexible current settings
- Street lights, parking lights and Architecture lights
- LED Horticulture lights

■ Model List*(See part number scheme for model number details)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
L4WCP320S888ST	108~305Vac	320W	18-36V	888mA	8880mA	92.5%	UL/cUL
L4WCP320S666ST	108~305Vac	320W	36-48V	666mA	6660mA	92.5%	UL/cUL
L4WCP320S593ST	108~305Vac	320W	48-54V	593mA	5930mA	93%	UL/cUL
L4WCP320S552ST	108~305Vac	320W	54-59V	552mA	5520mA	93%	UL/cUL
L4WCP320S210ST	108~305Vac	320W	59-152V	210mA	2100mA	93%	UL/cUL
L4WCP320S140ST	108~305Vac	320W	152-228V	140mA	1400mA	93.5%	UL/cUL
L4WCP320S070ST	108~305Vac	320W	228-428V	70mA	700mA	94%	UL/cUL

■ Technical Data

Input voltage range	108-305Vac
Frequency	47-63Hz
Power factor	> 0.95 @115Vac & 80~100% full load, > 0.90 @277Vac & 80~100% full load
Output voltage	36-428V
Output power	320W

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■ **Technical Data(cont.)**

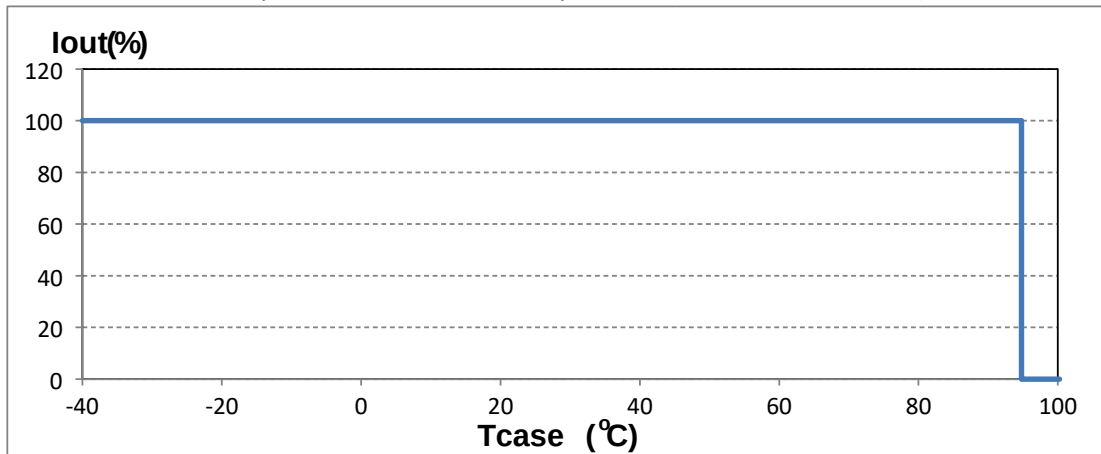
Max. Voltage ripple	±0.5%
Max input current	3.5A
Max input Power	360W
Efficiency	92.5%-94%
Output AUX Power Voltage (optional)	12V
Output AUX Power Current (optional)	0-100mA
Max. open circuit voltage	39V, 51V, 63V, 63V, 160V, 240V, 450V
THD	< 20% @120- 277Vac & 80~100% full load
Protection	OVP, SCP, OTP, and Open Circuit Protection
Environmental Protection	UL Dry &Damp and wet
Working Temperature	-40~+70°C
Max Case Temperature	90°C
Surge Protection	L-N 5.5kV, L/N-Earth 11kV
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)
Isolation (primary to Secondary)	3750Vac/10maMax/60 seconds
Isolation (Primary to Earth)	1875Vac / 10mAMax / 60seconds
Isolation (Secondary to Earth)	1875Vac / 10mAMax / 60seconds
Dimension	245x84x42.5 mm (9.65x3.31x1.67 inch)
Mounting Length	259mm (10.2 inch)
Overall Length	269 mm (10.59 inch)
Weight	1.7 kg (3.75 lb)
Lifetime	>70,000 hours @ full load, 75°C Tcase
Packing	1.7 kg; 12 units/carton; 27 cartons/pallet

■ **Safeties**

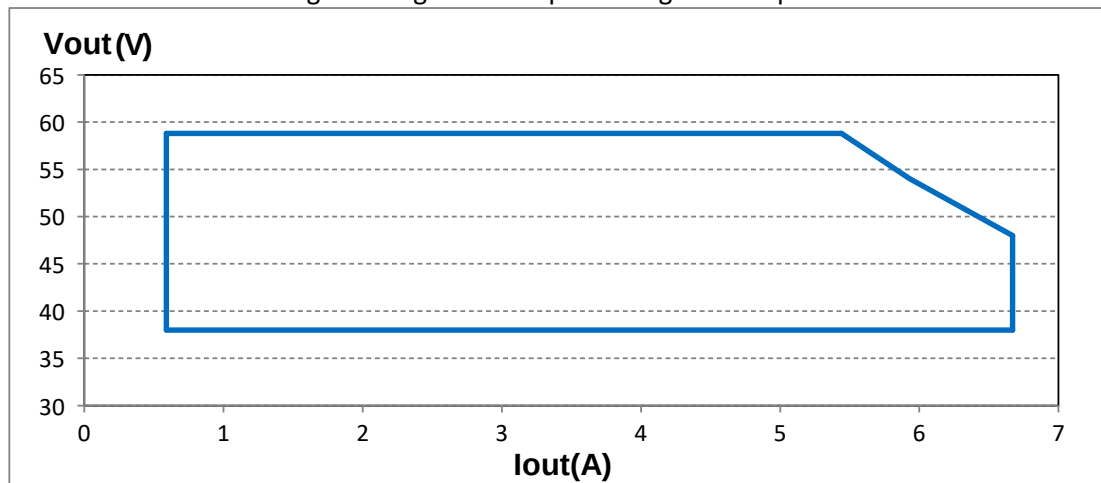
Safeties	UL8750
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B

■ **Electrical Specifications***(L4WCP320SXXXST @25°C)

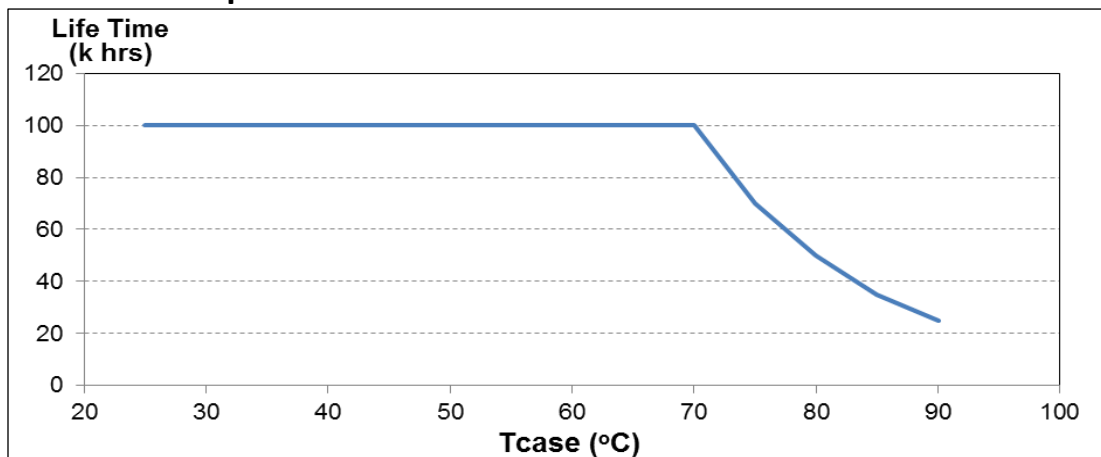
Output Current vs. Case Temperature (with $\pm 5^\circ\text{C}$ Tolerance)



I-V Programming Area: Output Voltage vs. Output Current

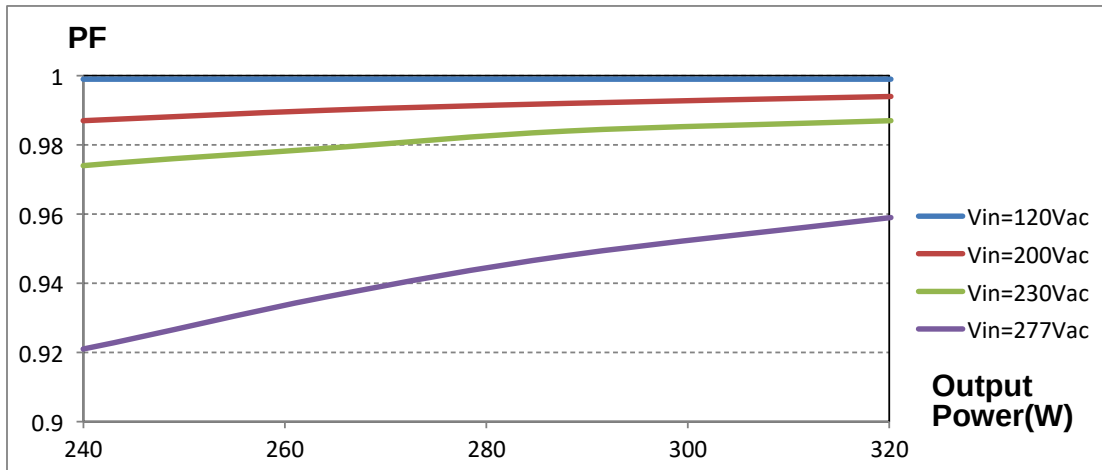


■ **Lifetime vs Case Temperature**

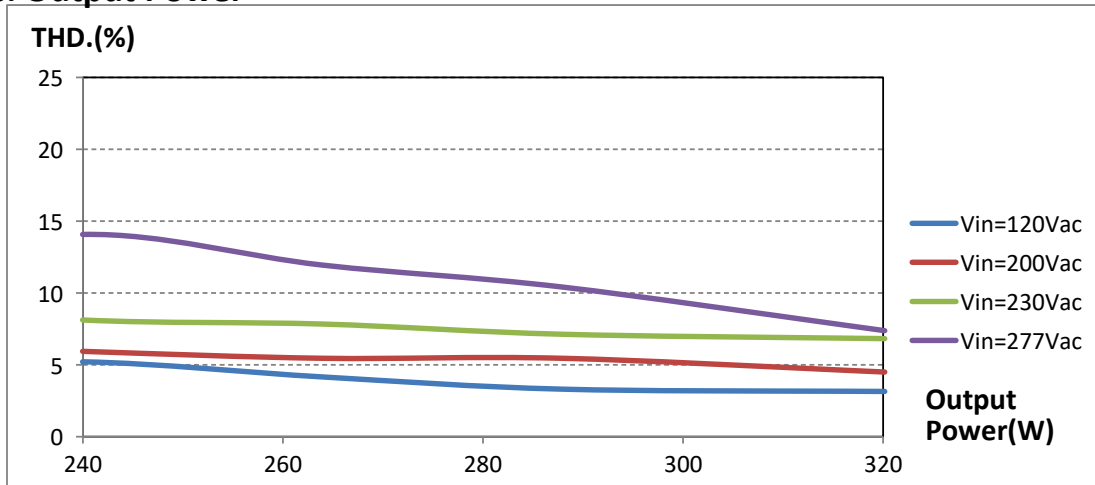


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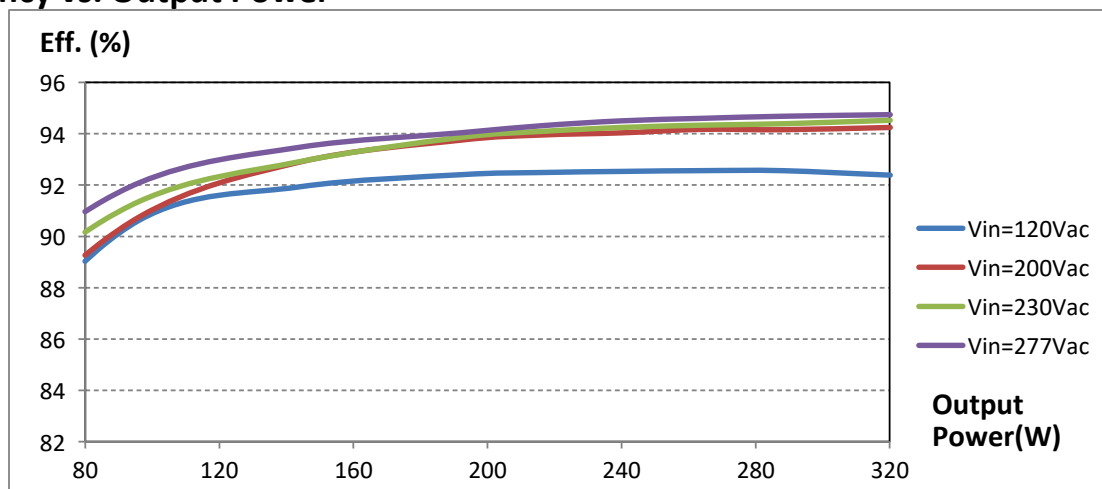
■ **Power Factor vs. Output Power**



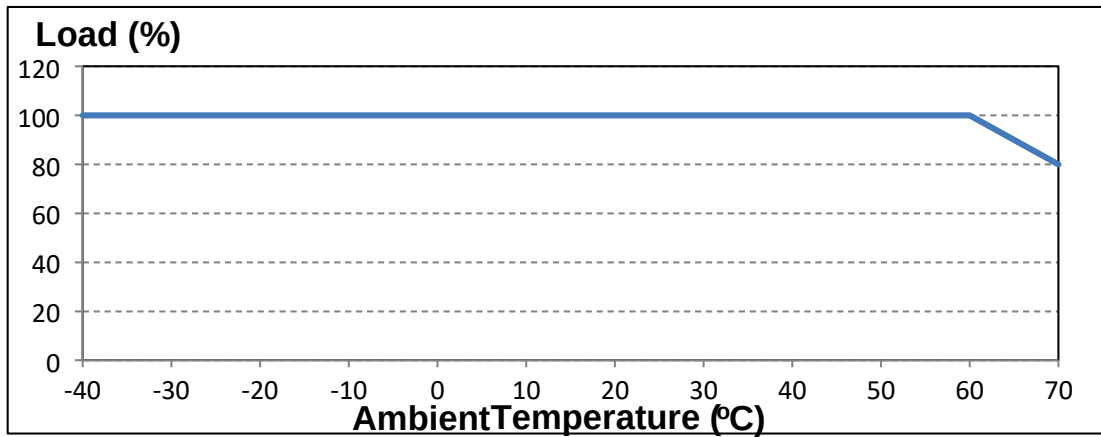
■ **THD vs. Output Power**



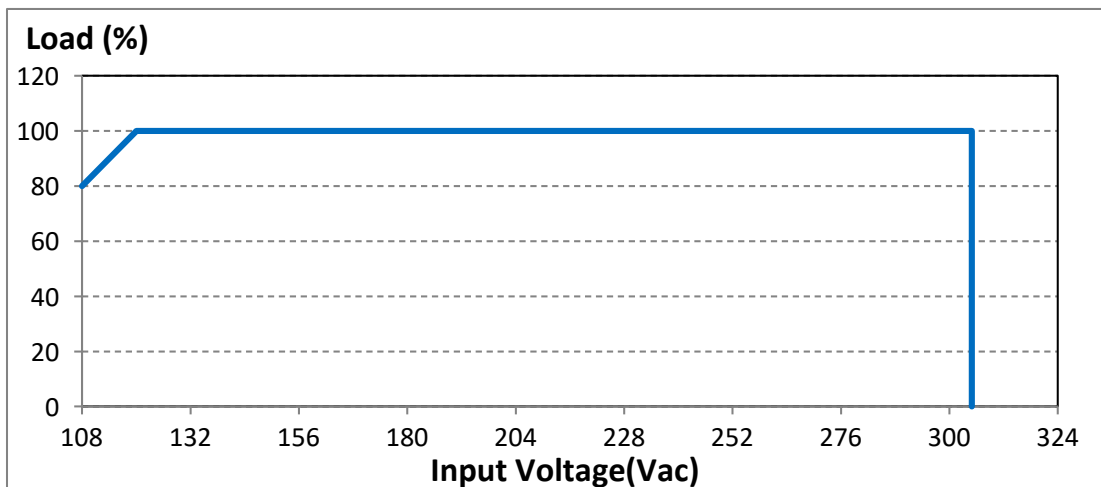
■ **Efficiency vs. Output Power**



■ Derating Curve

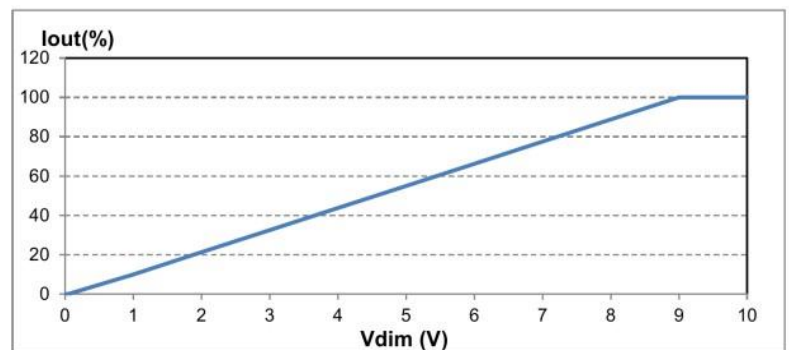
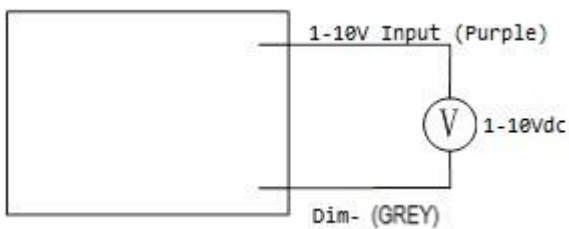


■ Static Characteristics



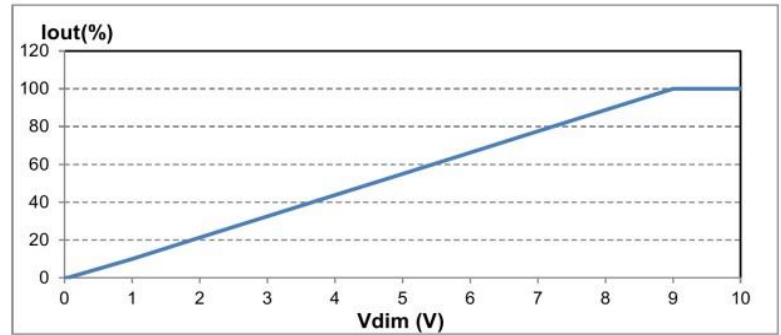
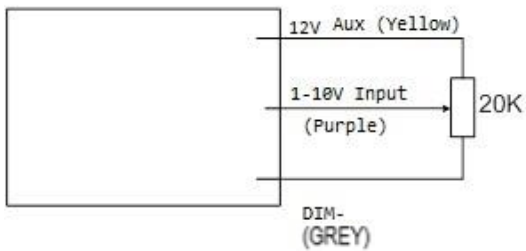
■ Dimming

Mode 1 : 1-10Vdc Input on Dimming Control

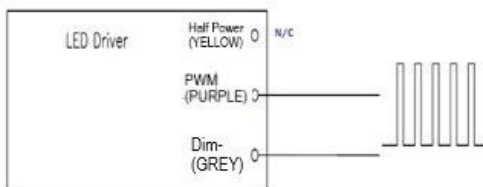


■ **Dimming(cont.)**

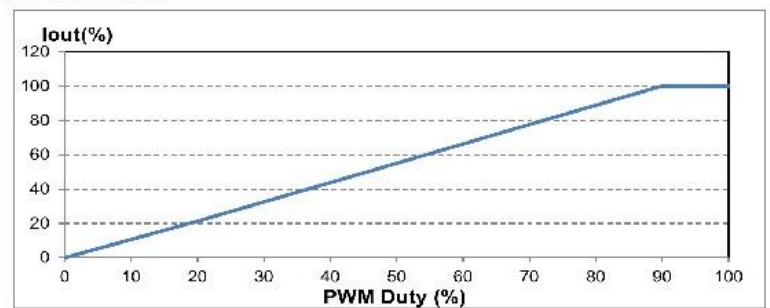
Mode 2 : Potentiometer on Dimming Control



Mode 3 : PWM Signal on Dimming Wires



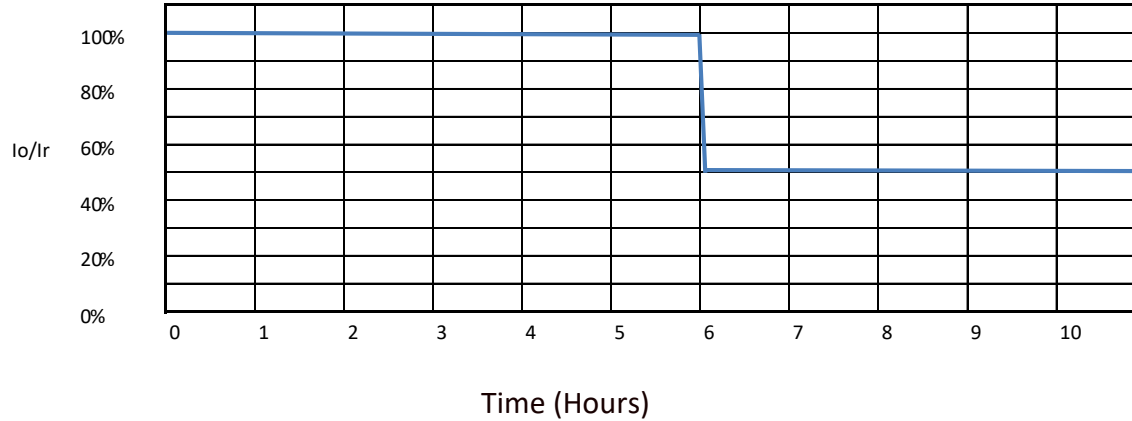
Io/Ir vs PWM Duty



Parameter	Values	Conditions
Input Voltage	0~10 V	Purple wire.
Input Current	10 mA	
PWM Frequency	0.5 ~ 3 kHz	
PWM Pulse Width	10%~100%	

■ **Dimming(cont.)**

Mode 4 : Timer Dimming (Does not require dimming wires)

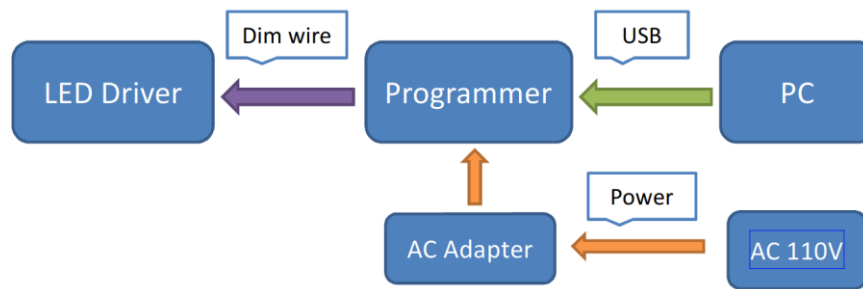


Standard power/time combination above, can be factory set to customer specification. Recycle AC to restart timer.

NOTE:

1. If the dimming function is not used, cap the dimming wires and don't use them.
2. I_o is actual output current and I_r is rated current without dimming control.
3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, approximately 50% of the max. output voltage for any given mode.
4. The dimming signal can be less than 1V, when it is 0-1V, the output current can maintain about 10% I_r , however, the connected LEDs may flicker. Maintain dimming voltage greater than 1V in the application is strongly recommended.
5. Pulse width less than 10% will cause the driver to work improperly.

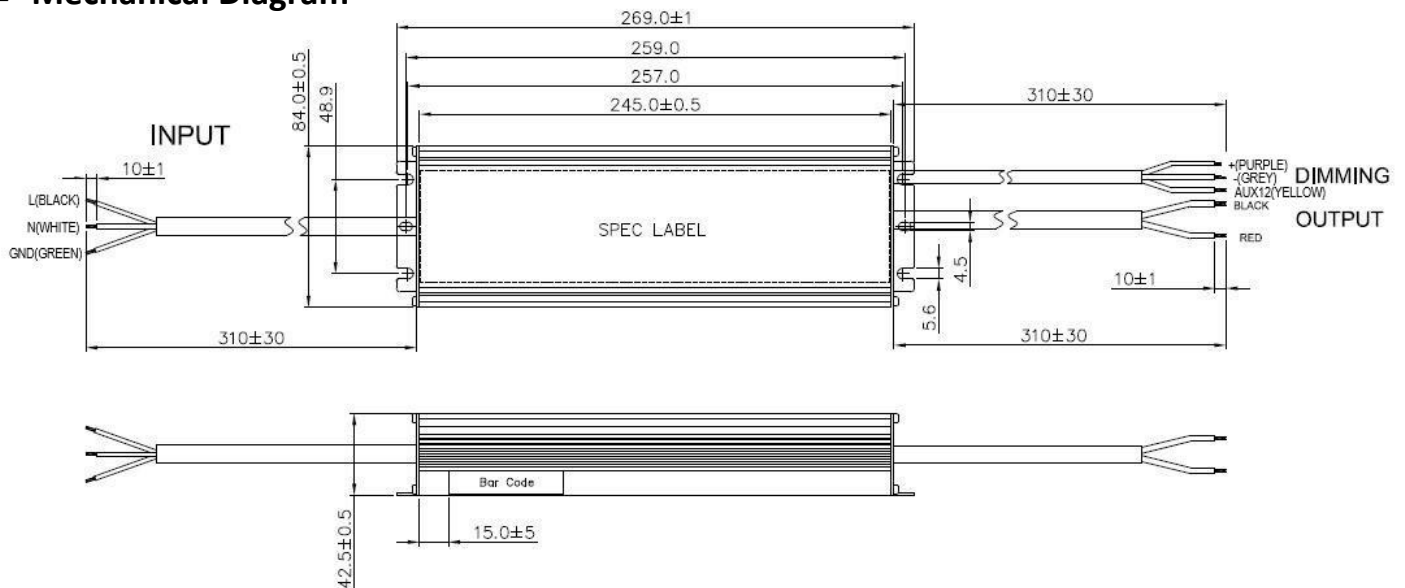
■ PC Programming Diagram



NOTES:

1. To set the desired output current, begin by installing the programming software on your PC and connect the programming module to your PC.
2. Next, connect the LED Driver to the programming module using the Dimming wires.
3. Please note an external power source is needed to provide power to the programming module.
4. Contact Autec Sales for current programming software and complete programming instructions.

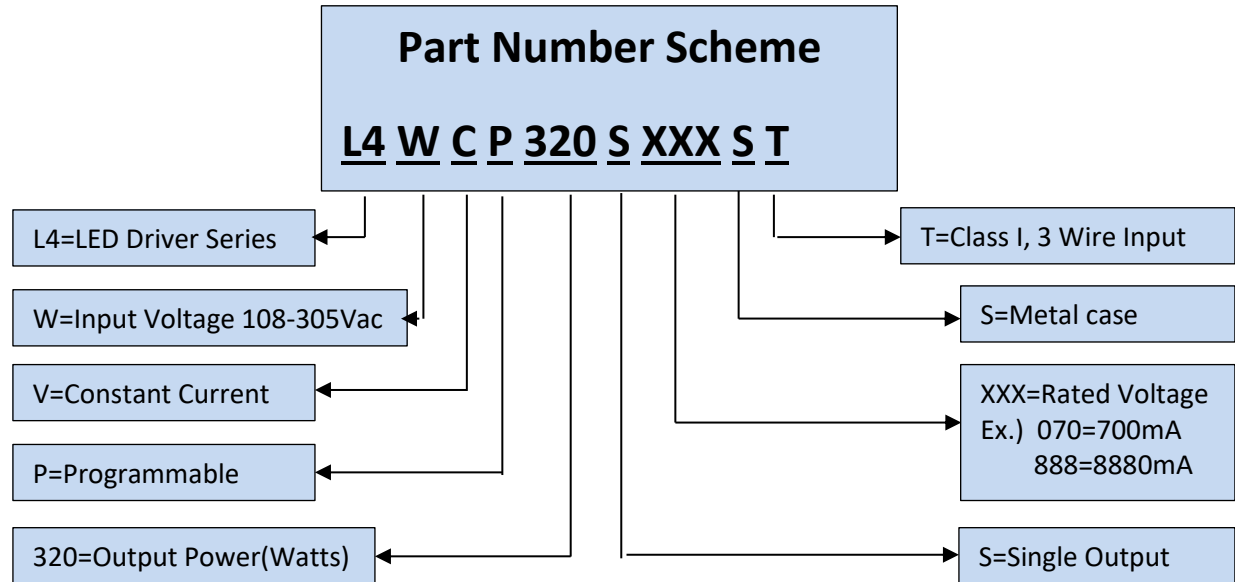
■ Mechanical Diagram



- Notes:**
1. Outline Dimension: 269L*84W*42.5H
 2. Input and Output Connector and Pin Assignment
 3. The Green Dimming wire is optional for 12V Auxiliary Power

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Wire Specifications		Colors
Input Wire	3/#18AWG	L= Black, N=White, GND=Green
Output	2/#18AWG	V+ is Red, V- is Black
Dimming Wire	3/#22AWG	Dim + is Purple, Dim Return is Grey, AUX12V+/100mA is Yellow



***Product images are for illustrative purposes only and may vary from actual design.**

***Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.**

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