LED Dimming Driver

Product Specifications

LP1090-XX-YZ-E-Dw / LP1060-XX-YZ-E-Dw Switch-Mode LED Driver	
Total Power	60 - 96 Watts
Input Voltages	90-264 VAC or 100-277VAC
Number of Outputs	One

ANZ#: Z151c, March 15, 2010

SPECIAL FEATURES

- UL1310 / UL879 Class 2 recognized
- Provided with 0~10V Dimming Control
- Compatible with standard ballast dimmer
- Meet IP66 standards
- Suitable for damp or dry locations
- Suitable for wet location with adequate end plate and connectors
- Built-in wiring compartments for easy installation (selected models)
- Compact, lightweight w/ aluminum case
- Active PFC to conserve power consumption

ENVIRONMENTAL

Operating temperature: -30 to 70 º C
(De-rating : 2% per º C from 50ºC)
Storage temperature: -40 to 85 º C
Humidity (Non-Condensing): 5% to 95%
Cooling: Convection
Vibration Frequency: 5 to 50 Hz
MTBF: >100,000 Hours at full load and 25ºC ambient conditions (MIL-217F)
EMC : Compliant to 47CFR, Part 2, Part15 and Cispr PUB, 22 Class A

ELECTRICAL SPECIFICATIONS

Input range	90 to 264 VAC(60W) ; 100-277VAC(96W)
Frequency	47 to 63 Hz
Power Factor	> 0.92 at full load, 115VAC
Crest Factor	1.5 max.
Inrush current	40.0 Amps maximum at 230VAC, cold start, 25º C
Input current	1.5Amps maximum at 90VAC
Efficiency	85% typical at 230VAC and maximum load
EMI filtering	47CFR, Part 2, Part 15 and Cispr PUB, 22 Class A
Maximum power	96W
Dimming range	8% ~ 100%
Load regulation	±3%
Leakage Current	0.2mA @ 110VAC, 0.4mA @ 230VAC
Hold up time	Half cycle minimum at 120 VAC and 80% of rated load
Protection	Over-voltage, Over-current, Over-power and Short circuit protection: Auto-recovery

SAFETY

UL	UL1310 / UL879 Class 2 (only apply to –CV models)
CE	Certified

MODEL INFORMATION – SINGLE OUTPUT

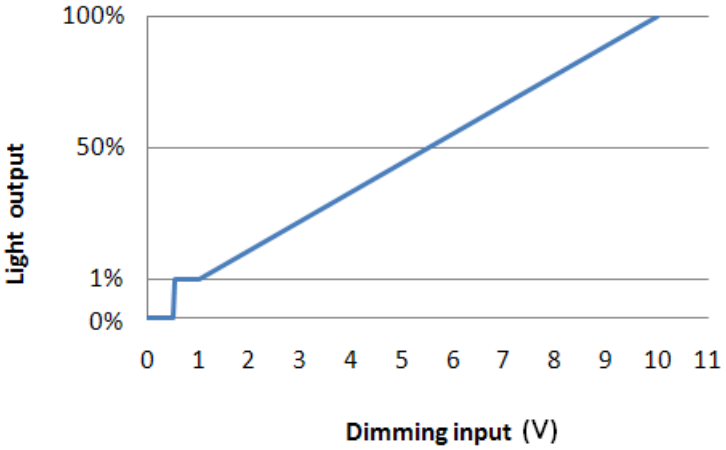
Model Numbers	Constant Voltage Mode Output		Total output (Watts)
	Adjust range (Vdc)	Current range (A)	
LP1090-24-YZ-E-Dm	18 ~ 24	1.5 ~ 4.00	96
LP1090-19-YZ-E-Dm	12 ~ 19	2.0 ~ 5.00	60 ~ 95
LP1060-24-YZ-E-Dm	20 ~ 24	1.5 ~ 2.50	60
LP1060-12-YZ-E-Dm	10 ~ 12	2.5 ~ 5.00	60

MODEL INFORMATION

Model Information – Single DC output
LP1090-XX-YZ-E-Dm / LP1060-XX-YZ-Dm

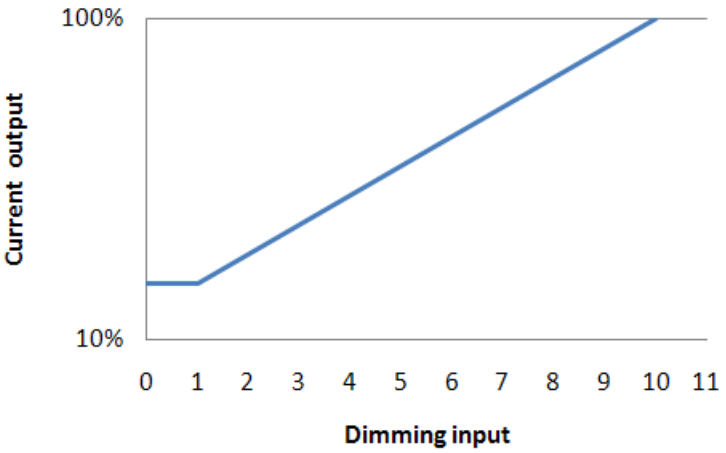
Y – AC input side plate options, refer to drawing for more details
Z – G = Gland
E – Aluminum enclosure length, 290mm, refer to drawing for more details
m = V – DC outputs Constant voltage Dimming (PWM over 200Hz)
m = C – Constant current dimming

DIMMING INFORMATION



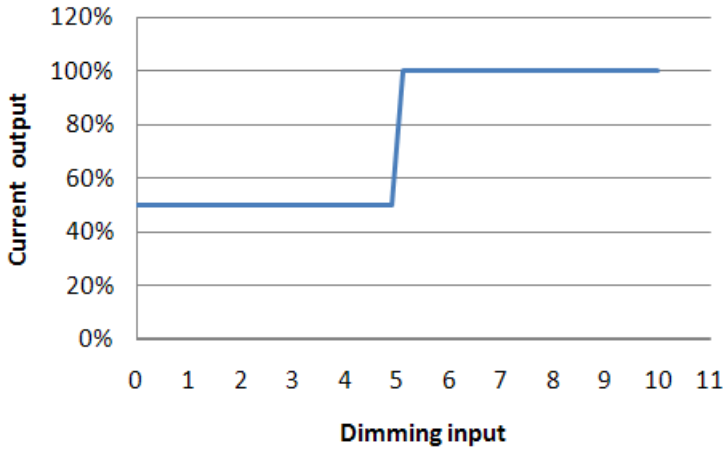
CONSTANT VOLTAGE FULL RANGE DIMMING – DESIGN FOR CONSTANT VOLTAGE DRIVEN LED

Design to work with a standard 0-10V controller.
A wall box controller will only go from 10V down to 0.7V – the light output will go from 100% to 8% and will not turn off completely unless AC power is disconnected, this is needed for energy saving. When using 0-10V controller, it should go from 10V all the way down to 0V and the light output will turn off completely.



CONSTANT CURRENT FULL RANGE DIMMING – DESIGN FOR CONSTANT CURRENT LED

Design to work with a standard 0-10V controller.
The light output will only go from 100% down to 8% and will not turn off completely unless AC power is disconnected, this is needed for energy saving.



CONSTANT CURRENT TWO STEP DIMMING – DESIGN FOR CONSTANT CURRENT LED

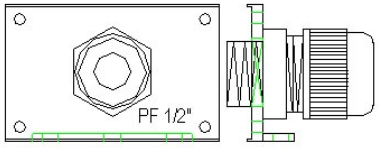
Design to work with a standard toggle switch or a 0-10V controller.
The light output has only two states 100% and 50% and will not turn off completely unless AC power is disconnected, this is needed for energy saving.

MECHANICAL DRAWING (AC INPUT VS. DC OUTPUT)

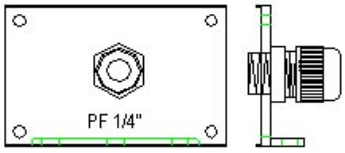
LP1090-XX-YZ-E-Dw / LP1060-XX-YZ-E-Dw

Y – AC input side plate options (Gland not included)

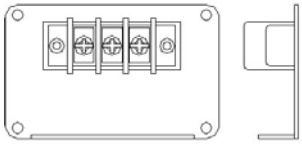
GM-PF21-G



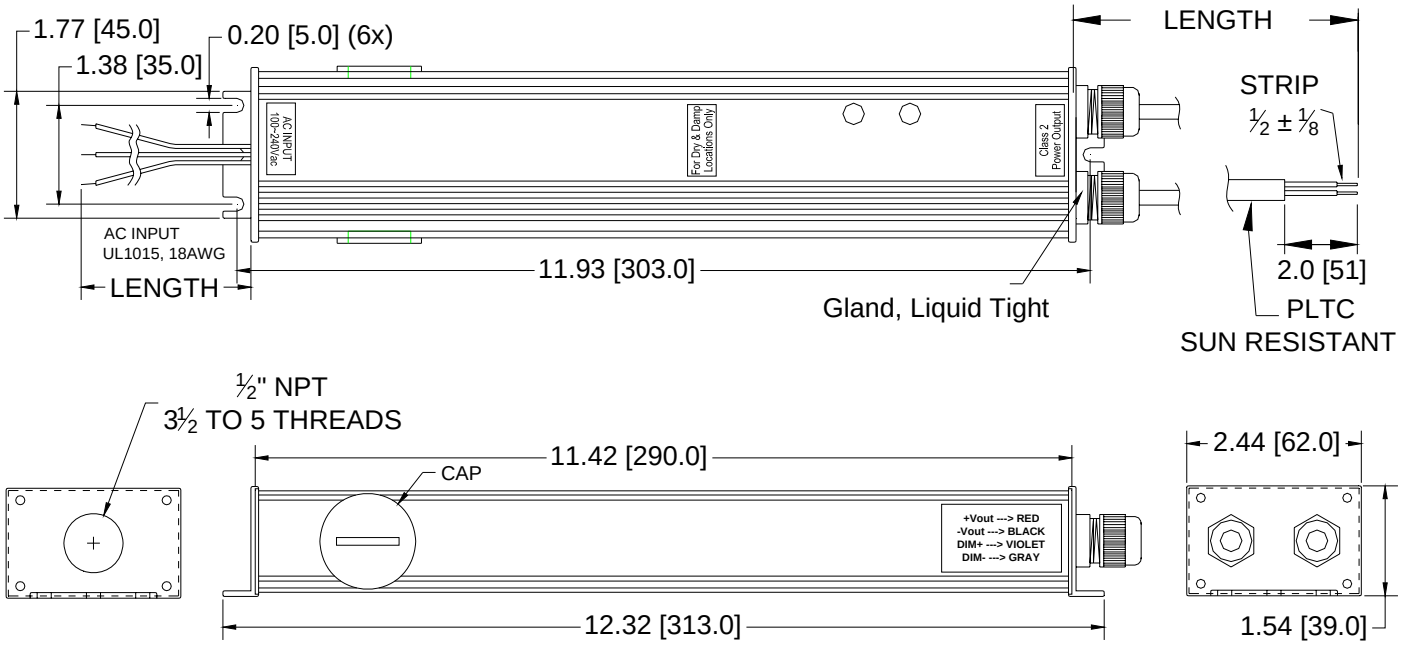
GM-PF13-G



TL-03-T



Note: End plates and liquid tight glands for wet location application can be ordered separately.



CON	PIN	COLOR	OUTPUT	AWG	LENGTH
AC IN	---	BLACK	LINE	18	4.4 [112]
	---	WHITE	NEUTRAL	18	+0.6 [+15]
	---	GRN/YEL	AC GND	18	-0.0 [0.0]
DC OUT	---	RED	+V	18	12.0 [305] ±1.0 [±25]
	---	BLACK	GND	18	
CON-TROL	---	VIOLET	DIM+	18	
	---	GRAY	DIM-	18	

