

PLDC150 SERIES

150W Single Output LED Driver



- Wide Input Voltage 20 to 30VDC
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 95%)
- dimming function optional (0~10V /PWM/ Timer)
- IP67 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

3 Year Warranty

Approvals: IP67  

SPECIFICATION

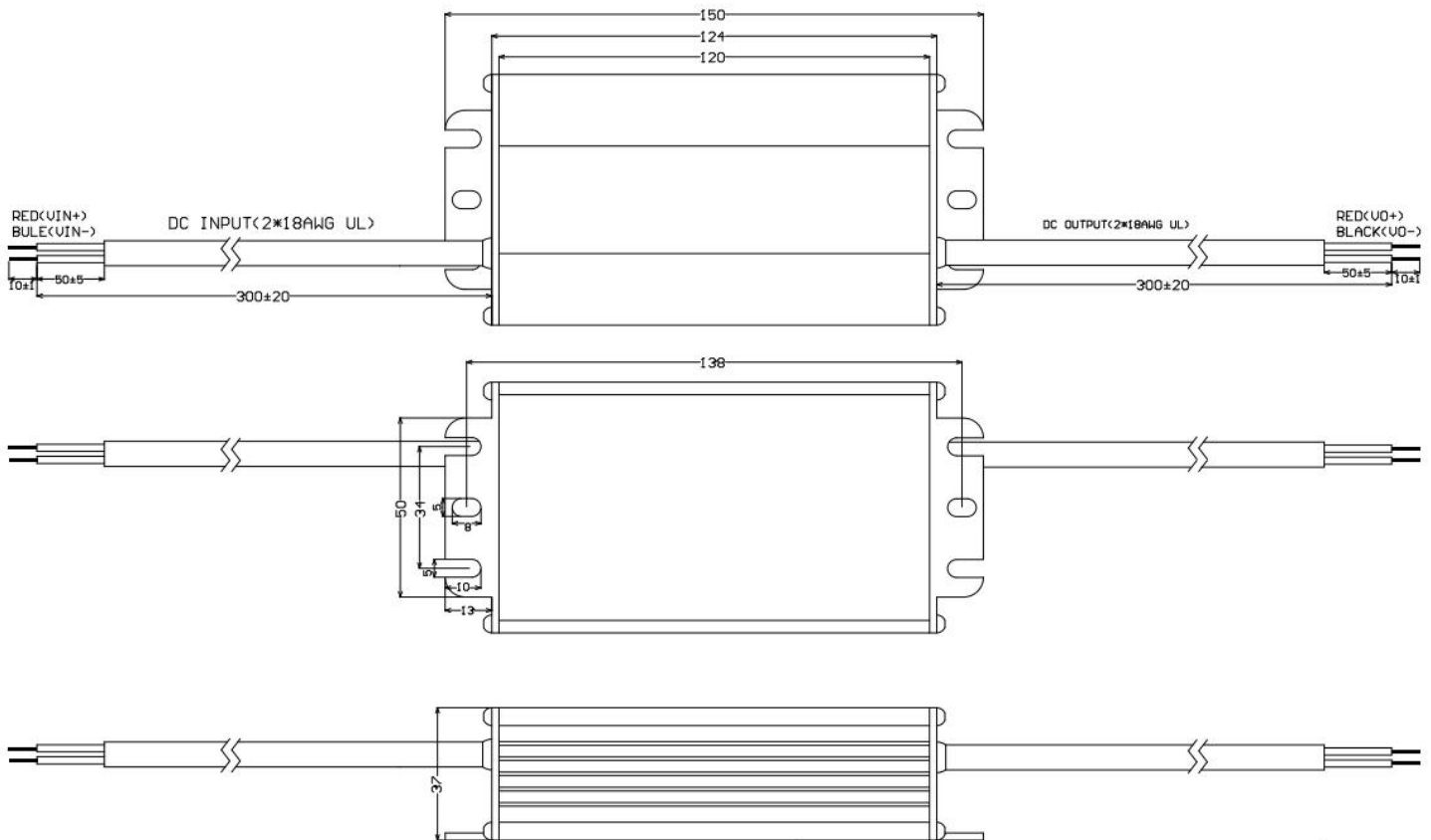
Part Number	PLDC150-1400M	PLDC150-2100M	PLDC150-2800M	PLDC150-3500M		
OUTPUT	DC VOLTAGE		58-96V	43-71V	33-54V	33-43
	CONSTANT CURRENT REGION Note.4		1400mA	2100mA	2800mA	3500mA
	RATED POWER		150W			
	RIPPLE & NOISE(max.) Note.2		0.98V	0.78V	0.55V	0.45V
	VOLTAGE TOLERANCE Note.3		±5.0%			
	LINE REGULATION		±1.0%			
	LOAD REGULATION		±1.0%		±1.0%	
SETUP, RISE TIME(Typ.) Note.7		250/98 24VDC at full load				
INPUT	VOLTAGE RANGE Note.5		20 ~ 30VDC			
	EFFICIENCY(Typ.)		95%	95%	94%	94%
	DC CURRENT(Typ.)		6.65A/24VDC			
	INRUSH CURRENT(Typ.)		COLD START105A at 24VDC			
	LEAKAGE CURRENT		<0.6mA/24VDC			
PROTECTION	OVER CURRENT Note.4		95 ~ 108%			
	SHORT CURRENT		Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	OVER VOLTAGE		99V	90V	68V	47V
	OVER TEMP.		Protection type: Hiccup mode, recovers automatically after fault condition is removed			
	WORKING TEMP.		Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.		-35 ~ +70°C (Refer to "Derating Curve")			
	WORKING HUMIDITY		10 ~ 100% RH non-condensing			
	STORAGE TEMP., HUMIDITY		-40 ~ +85°C, 5 ~ 100% RH			
	TEMP. COEFFICIENT		±0.3%/°C (0~50°C)			
	VIBRATION		10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	ISOLTATION RESISTANCE		I/P – FG: 100M Ohms / 500VDC /25°C / 70% RH			
OTHERS	MTBF		430khrs min.	MIL-HDBK-217F (25°C)		
	DIMENSIION		104*43.5*34.5MM (L*W*H)			
	PACKING		590g			

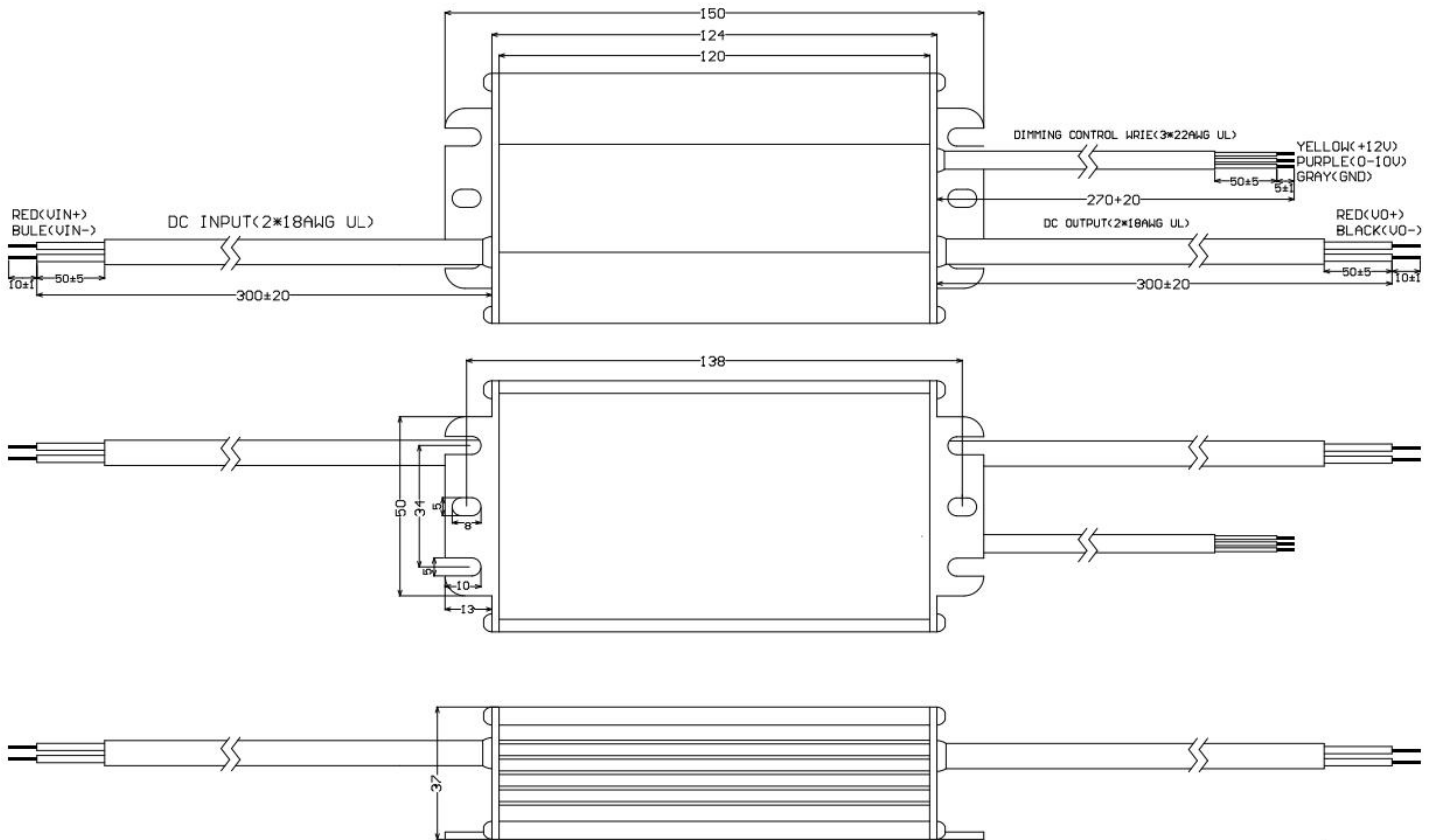
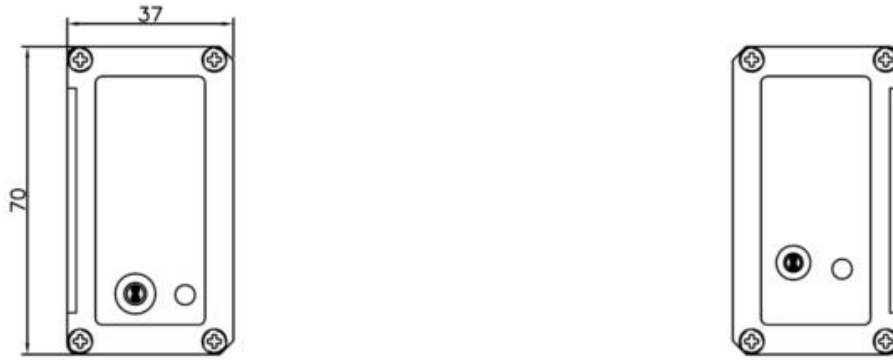
NOTE

1. All parameters NOT specially mentioned are measured at 24VDC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation & load regulation.
4. Please refer to "DRIVING METHODS OF LED MODULE".
5. Derating may be needed under low input voltages. Please check the static characteristics for details.
6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
8. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

Mechanical Specification

NO Dimming Function Mechanical





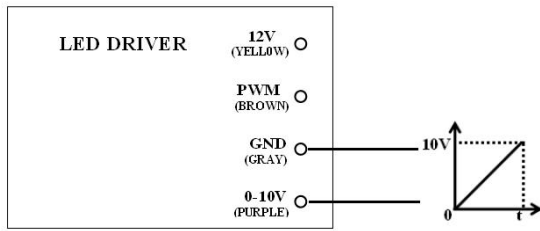
Dimming Function

TIMER Dimming

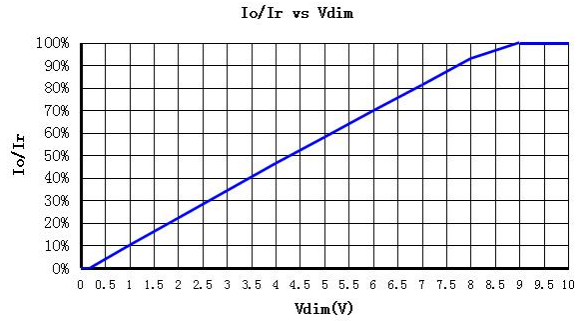
NOTE:

1. The dimming time can be customized according to different orders.

0-10V Analog Dimming



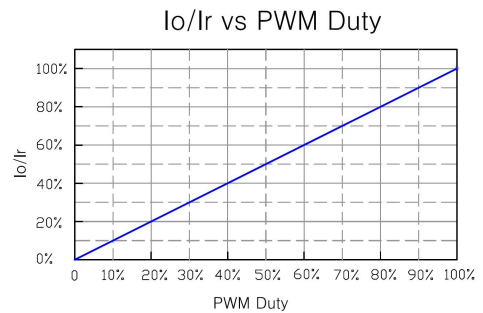
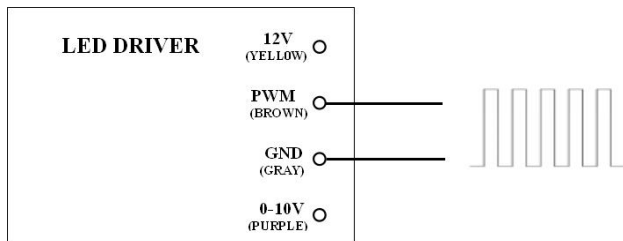
Input Dimming Voltage	0-12V	Normal 10-11V
Input Source Current	0-10mA	47 ~ 63Hz



NOTE:

1. If the dimming function is not used, all wire NC.
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 input voltage t , proximately 50% of the max. output voltage for any given mode.
4. The dimming signal is allowed to be less than 1V, when it for 0-1V, the connected LEDs may flicker. Keeping dimming voltage greater than 1V in application is strongly recommended.
5. Do not connect the **GND of dimming (gray)** to the output. Otherwise, the LED driver can not work normally.
6. 12V supply made available (3~5W) in order to attach any sensors or wireless devices on **Yellow** wire

PWM Dimming



NOTE:

The frequency of PWM is 3kHz, the amplitude of PWM is 5V.