

### 80W DC Input Constant Current LED Driver



- Wide Input Voltage 20 to 30VDC
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 94%)
- Building-in dimming function ( 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

Approvals: IP67  

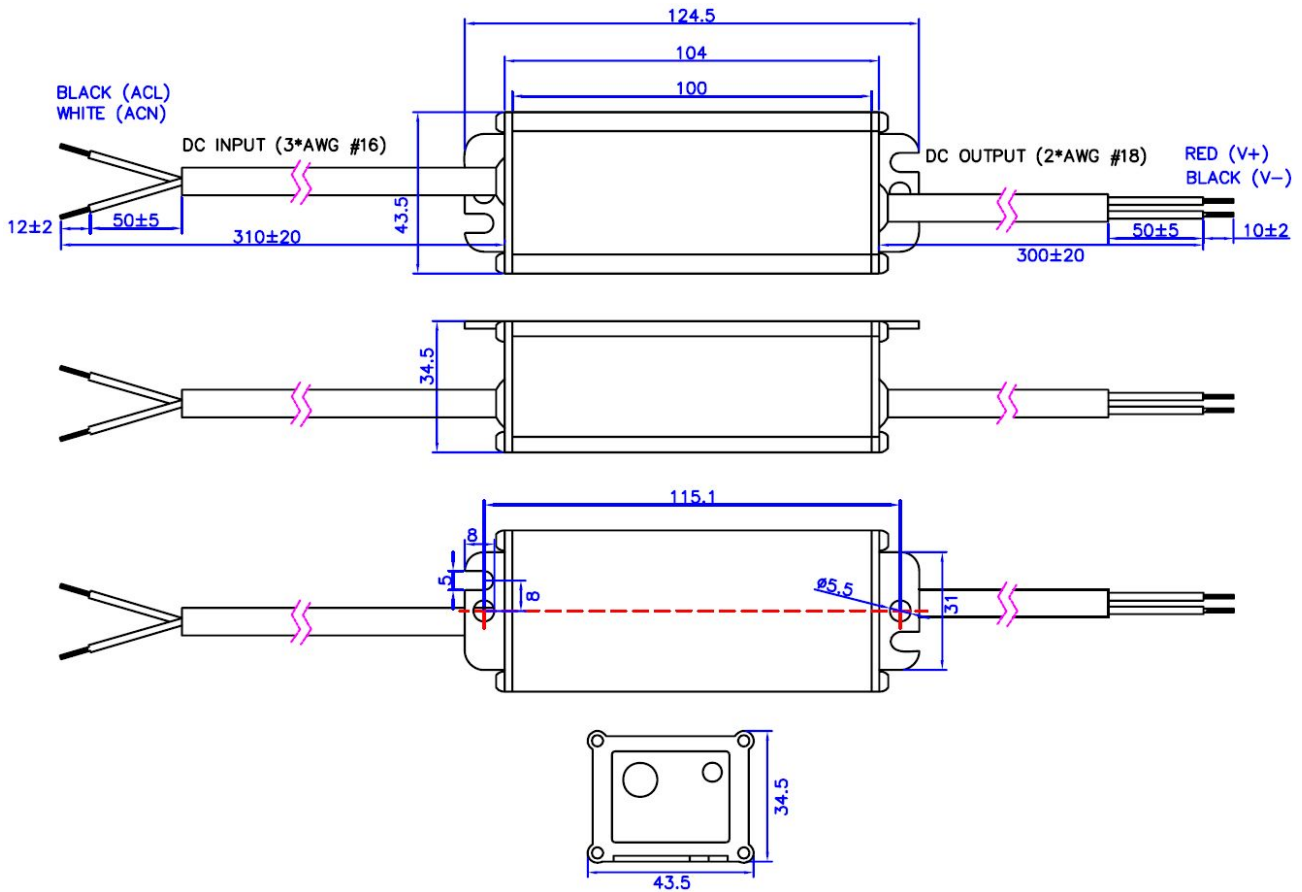
### SPECIFICATION

Part Number		PLDC080-0850M	PLDC080-1050M
OUTPUT	DC VOLTAGE	33-94V	33-76V
	CONSTANT CURRENT REGION Note.4	850mA	1050mA
	RATED POWER	80W	
	RIPPLE & NOISE(max.) Note.2	0.49V	0.34V
	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.)	94%	94%
	DC CURRENT(Typ.)	3.5A/24VDC	
	INRUSH CURRENT(Typ.)	COLD START105A at 24VDC	
	LEAKAGE CURRENT	<0.6mA/24VDC	
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type: Constant current limiting, recovers automatically after fault condition is removed	
	SHORT CURRENT	Hiccup mode, recovers automatically after fault condition is removed	
	OVER VOLTAGE	99V	81V
	OVER 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	SATETY STANDARDS Note.6	EN61347-1, EN61347-2-13	
	ISOLTATION RESISTANCE	I/P – FG: 100M Ohms / 500VDC /25°C / 70% RH	
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024	
OTHERS	MTBF	430khrs min. MIL-HDBK-217F (25°C)	
	DIMENSIION	104*43.5*34.5MM (L*W*H)	

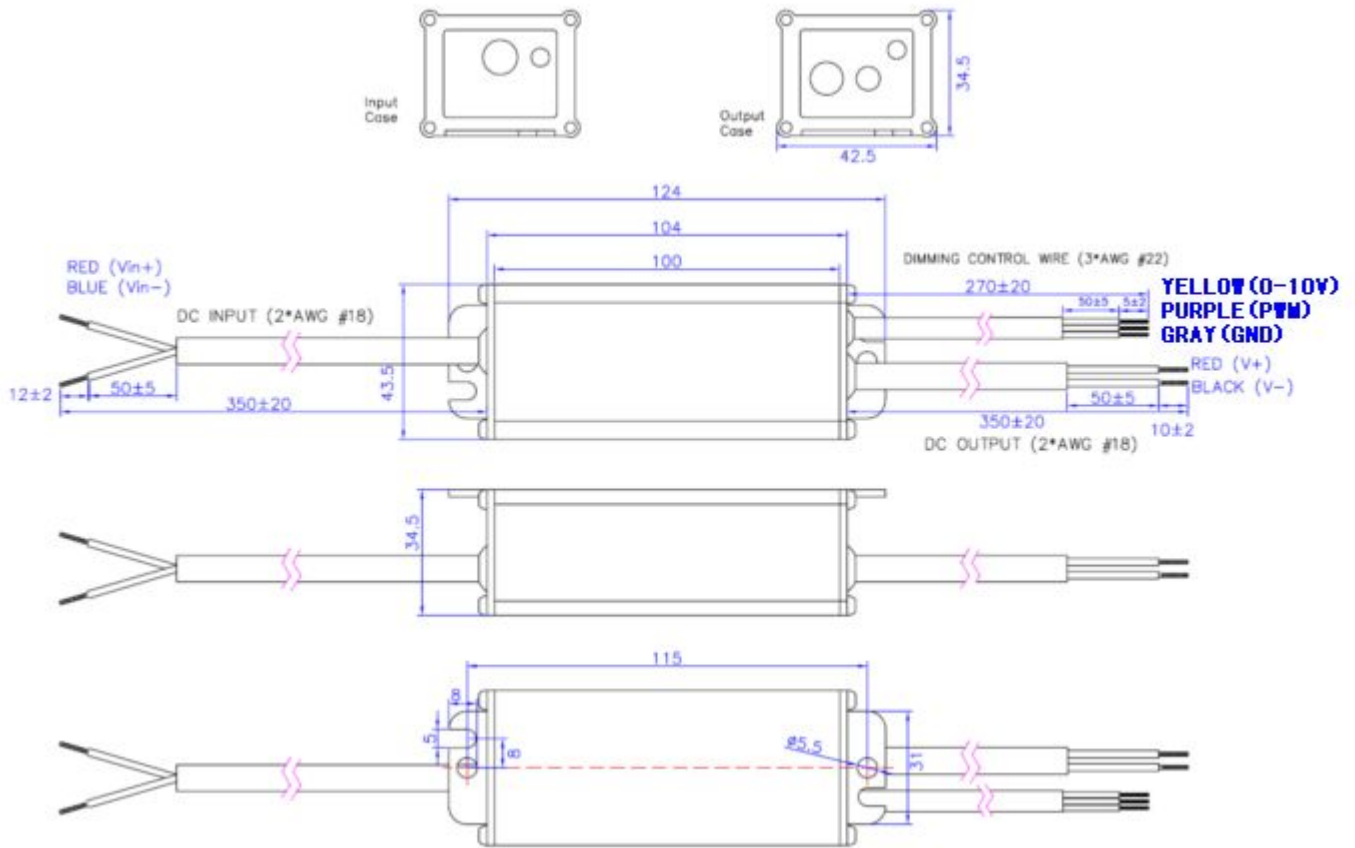
	PACKING	290g
<b>NOTE</b>	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance: includes set up tolerance, line regulation &amp; load regulation.</li> <li>4. Please refer to "DRIVING METHODS OF LED MODULE".</li> <li>5. Derating may be needed under low input voltages. Please check the static characteristics for details.</li> <li>6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.</li> <li>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.</li> <li>8. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must re-qualify EMC DIRECTIVE on the complete installation again.</li> <li>9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</li> <li>10. To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains.</li> </ol>	

### Mechanical Specification

#### NO Dimming Function Mechanical

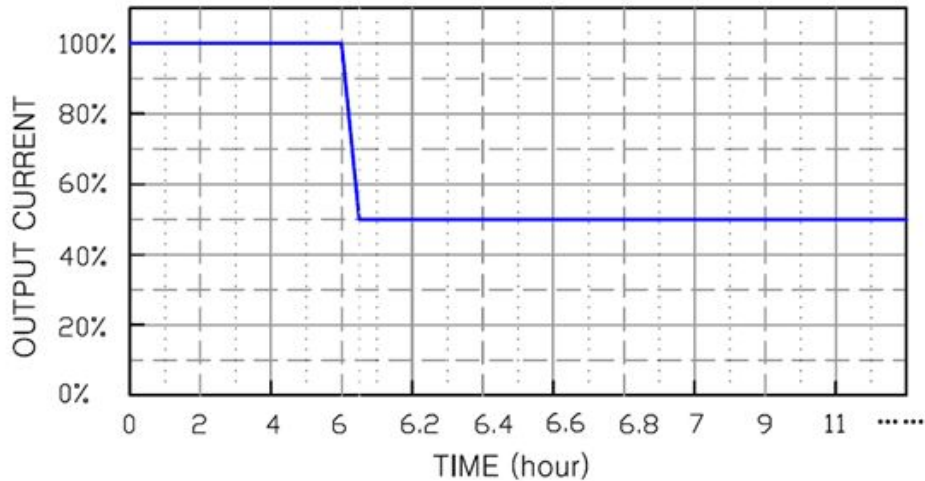


### Dimming Function Mechanical



### Dimming Function

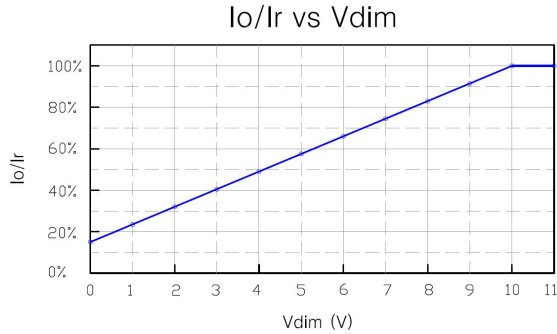
#### TIMER Dimming



**NOTE:**

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

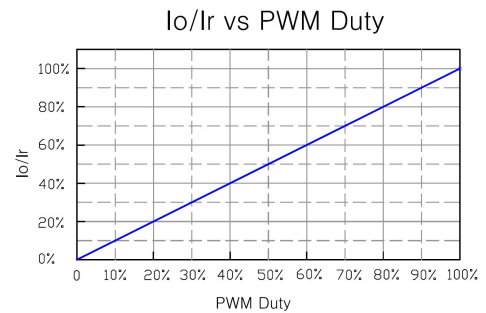
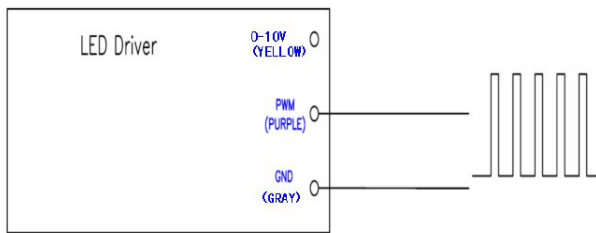
### 0-10V Analog Dimming



#### 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.

### PWM Dimming



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