

ADP-150WLP

150W Power with PFC and Dimming(Optional)

48V Constant Voltage & 3.0A Constant Current



Features

- Universal AC input (90~264V) or Full range (90~305Vac)
- Constant current operation on 36~47V range
- Constant voltage 48V operation under 3.0A output
- No flicker output
- IP67 design for outdoor installations
- Protections for Short circuit, Over load and Over temp.
- Dimming available (Optional)
with standard PWM or Linear(1-10V)dimming controller
- Suitable for high power LED lighting
- Long life time over 40.000 Hr / 3 years warranty

General Specifications

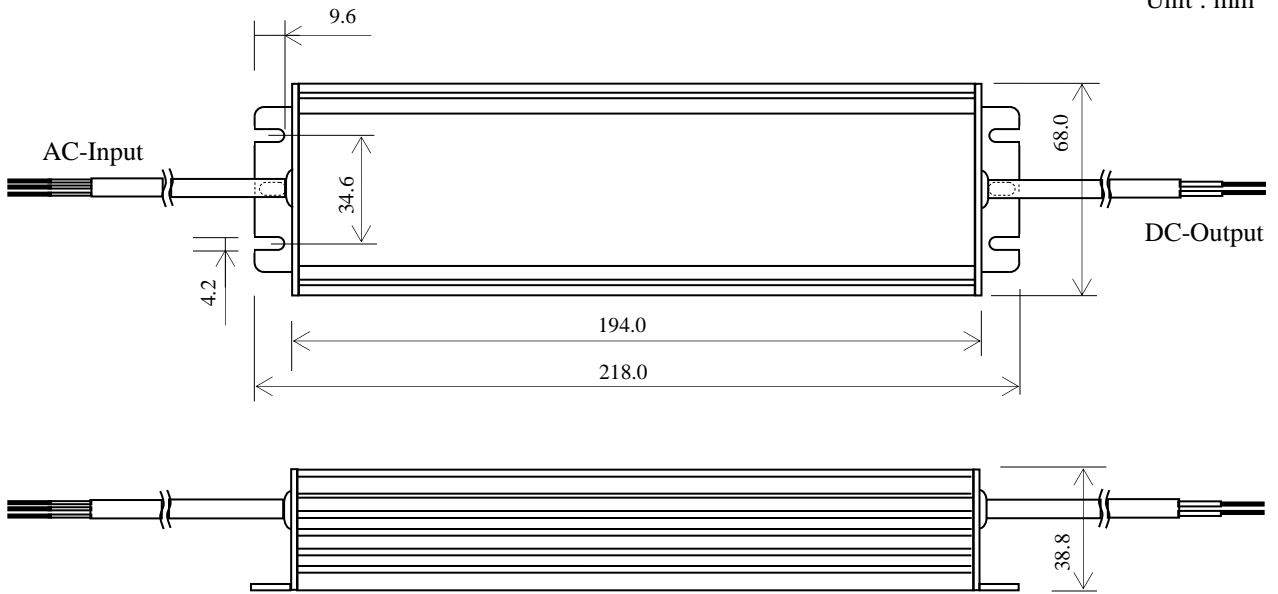
AC input voltage	90~264Vac for Normal, 90~305Vac for Full range, 47~63Hz
AC inrush current	30Amax at 240Vac, Cold start
DC output voltage	48V \pm 0.5V under the condition of constant voltage operation range
DC output current	3.0A \pm 0.1A under 36 ~47Vof constant current operation range
Power factor	Over 0.99 at 100V-Full load, Over 0.97 at 220V-Full load
Efficiency	89 \pm 1 % at 100V-Full load , 93 \pm 1 % at 220V-Full load
Working Temp.	-25 ~ +50 °C
Short protection	Latched when output shortage and restarted with switch on
Withstand voltage	I/P-O/P: 3.75KVac, I/P-FG: 2KVac, O/P-FG: 0.5KVac
Surge Immunity	L,N-FG : 4KV
EMC standards	EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
Input wire	UL rated, 0.75mm ² ×3C(40cm): Live/Brown, Neutral/Blue, FG/Yellow&Green
Output wire	UL rated, 1.0mm ² ×2C(40cm): LED+/White, LED-/Black
Dim. & Weight	218.0(L)×68.0(W)×38.8mm(H), 1000g

Notice : The specification is subject to change without notice

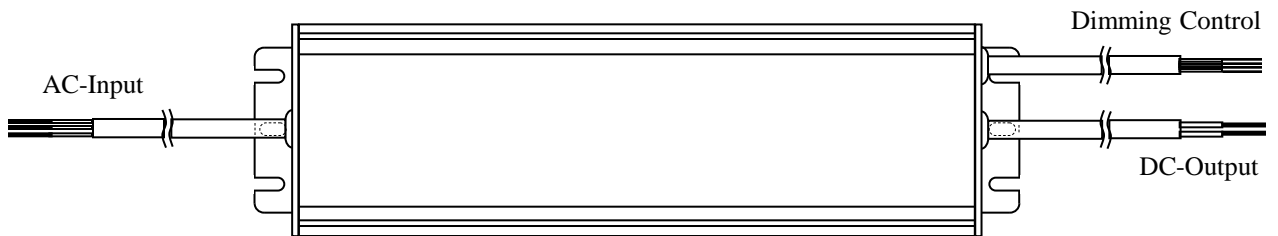
Mechanical dimensions & shape

Basic Model (w/o-dimming)

Tolerance : ± 0.5
Unit : mm



Dimming Model



Input & Output Cable

AC Input : UL Rated $0.75\text{mm}^2 \times 3\text{C} - 400 \pm 20\text{mm}$

Brown ; AC/Live

Blue ; AC/Neutral

Green/Yellow ; FG

DC Output : UL Rated $1.0\text{mm}^2 \times 2\text{C} - 400 \pm 20\text{mm}$

Red ; DC+

Black ; DC-

Dimming Control (Option) : UL Rated $0.75\text{mm}^2 \times 4\text{C} - 400 \pm 20\text{mm}$

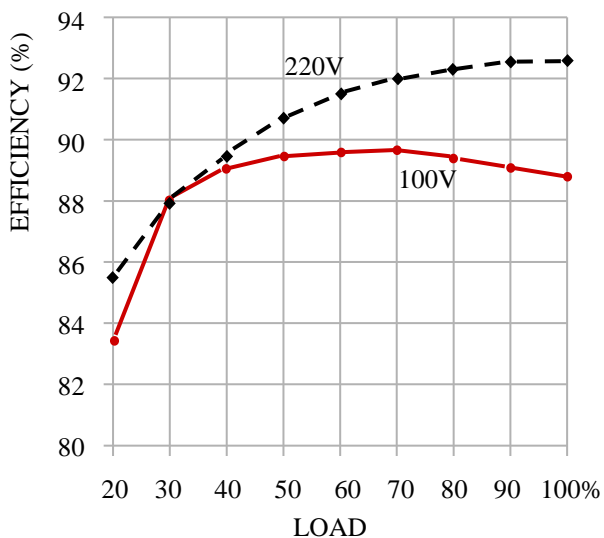
Yellow/Yellow (Non-Polar) ; Dim control

Orange ; Auxiliary 15V+

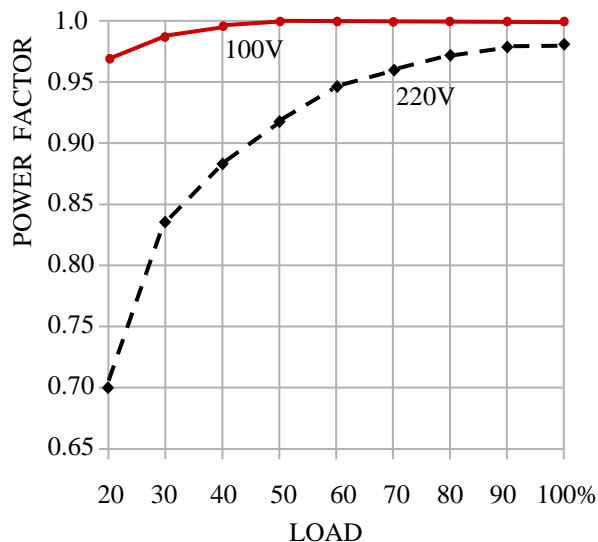
Blue ; Auxiliary 15V-

Electrical Characteristics

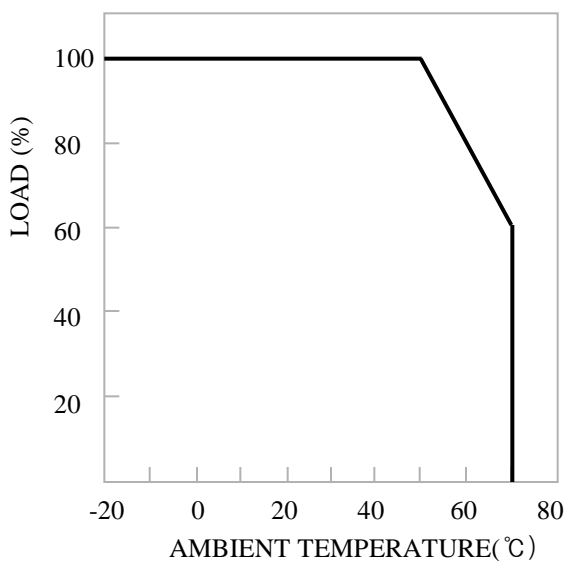
Efficiency vs Load



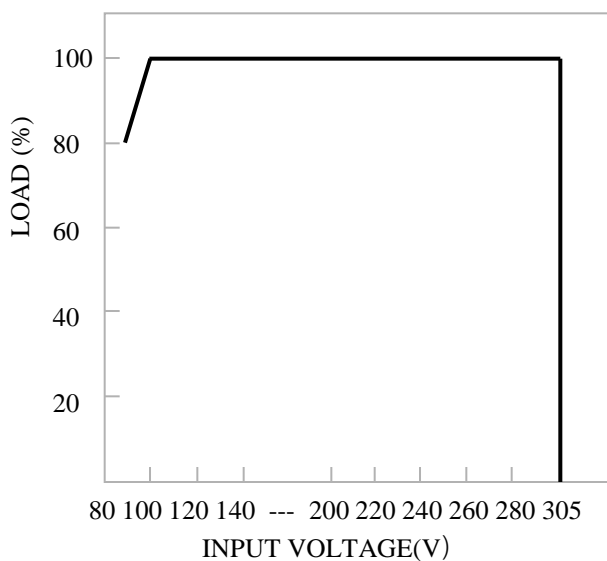
Power Factor vs Load



Derating Curve



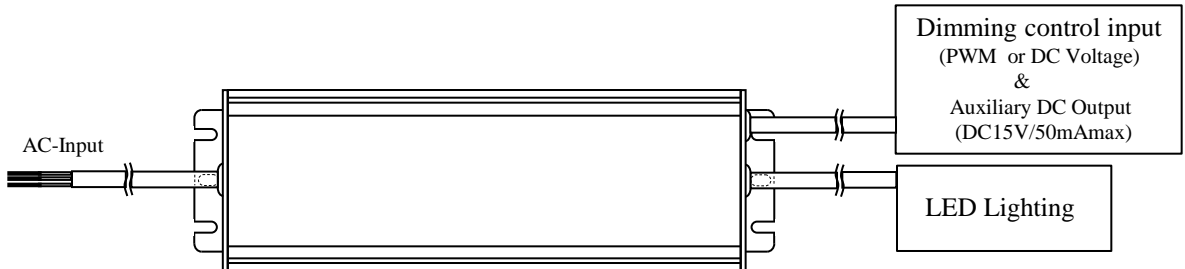
Static Characteristics



Dimming Control Options for Constant Current Operation

One method of Linear dimming or PWM Dimming available

► Dimming connection diagram



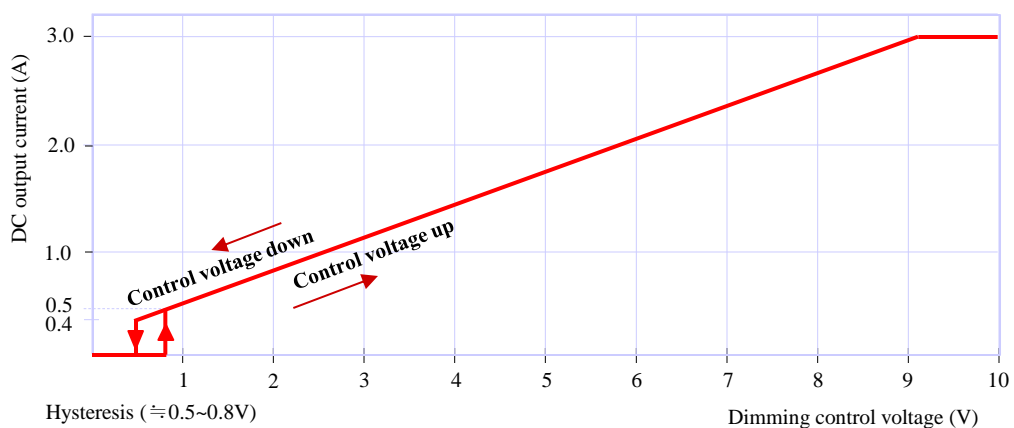
► Dimming characteristics

1. Linear dimming (Option 1)

- 1) LED lighting is Maximum bright or Off (selectable/option) when dimming signal input is open (not connected) or under 0.5V
- 2) Input impedance : around 15k Ω
- 3) Dimming control voltage range : 0~10V

Dimming control voltage	LED lamp (DC Output current)
Under 0.5V or No use of dim control	Lamp off or Bright max (selectable/option)
0.5~0.8V	ON(Bmin or Bmax) or OFF Hysteresis
Up 0.8V to 10V	Lamp Brightness Increasing
Down 10V to 0.5V	Lamp Brightness decreasing
9.2V over (max 12V)	Maximum bright

- Dimming curve characteristics (In case of Lamp off under 0.5V dimming voltage)

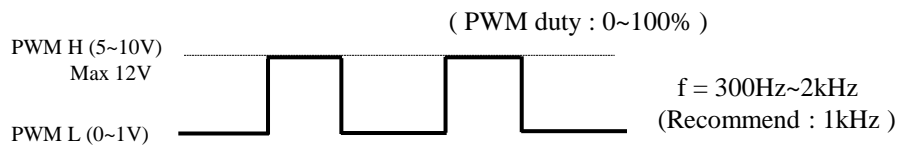


2. PWM dimming (Option 2)

- 1) No flickering due to the PWM dimming control input
- 2) LED lighting is Maximum brightness
when dimming signal input is open (not connected) or 100% duty
- 3) Input impedance : around 15k Ω
- 4) PWM polarity change available

Dimming control PWM duty	LED lamp (DC Output current)
Duty 100%	Minimum Brightness
Duty 0%	Maximum Brightness
No use of dim control	Maximum Brightness

- PWM control input signal



- Dimming curve characteristics

