

Наличие и актуальные цены на

# HVG-150-24A

https://www.mean-well.ru/store/HVG-150-24A/









#### Features

- Wide input range 180 ~ 528VAC
- · Constant Voltage + Constant Current mode output
- · Metal housing with Class I design
- · Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
   3 in 1 dimming (dim-to-off); Timer dimming
- Typical lifetime>50000 hours
- 5 years warranty



## Applications

- · LED street lighting
- · LED high-bay lighting
- · Parking space lighting
- · LED fishing lamp
- LED greenhouse lighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

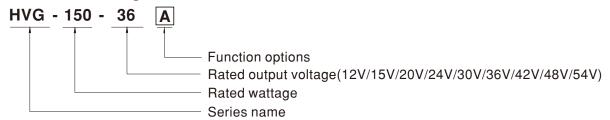
#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

# Description

HVG-150 series is a 150W AC/DC LED power supply featuring the dual mode constant voltage and constant current output. HVG-150 operates from  $180\sim528$ VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 91.5%, with the fanless design, the series is able to operate from -40°C through as high as +85°C case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. HVG-150 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

## **■** Model Encoding



Type IP Level		Function	Note
Α	IP65	Io and Vo adjustable through built-in potentiometer.	In Stock
В	IP67	3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



# 150W Constant Voltage + Constant Current LED Driver

#### **SPECIFICATION**

MODEL			HVG-150-12	HVG-150-15	HVG-150-20	HVG-150-24	HVG-150-30	HVG-150-36	HVG-150-42	HVG-150-48	HVG-150-54
	DC VOLTAGE		12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.4		7.2~12V	8.25~15V	11~20V	13.2~24V	16.5~30V	19.8~36V	23.1~42V	26.4~48V	29.7~54V
	RATED CURRENT		10A	10A	7.5A	6.25A	5A	4.17A	3.58A	3.13A	2.78A
	RATED POWER		120W	150W	150W	150W	150W	150.12W	150.36W	150.24W	150.12W
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE				y (via the built-		ter)				
			10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
OUTPUT			Adjustable for A/AB-Type only (via the built-in potentiometer)								
			6 ~ 10A	5.5 ~ 10A	4.13 ~ 7.5A	3.44 ~ 6.25A	2.75 ~ 5A	2.29 ~ 4.17A	1.97 ~ 3.58A	1.72 ~ 3.13A	1.53 ~ 2.78
	VOLTAGE TOLERA	NCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	N	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	N	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	Note.6	500ms, 80ms	/230VAC, 347	VAC, 480VAC						
	HOLD UP TIME (Typ.)		18ms/347VAC	, 480VAC							
		<u> </u>	180 ~ 528VAC 254VDC ~ 747VDC								
	VOLTAGE RANGE Note.5		(Please refer to "STATIC CHARACTERISTIC" section)								
	FREQUENCY RAN	GE	47 ~ 63Hz								
			$PF \ge 0.98/230VAC$ , $PF \ge 0.97/277VAC$ , $PF \ge 0.95/347VAC$ , $PF \ge 0.93/480VAC$ @full load								
	POWER FACTOR (	Тур.)									
			(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)  THD< 20%(@ load ≥ 50%/230VAC, 277VAC, 347VAC [@ load ≥ 60% only for 12V model]; @ load ≥ 75%/480VAC)								
	TOTAL HARMONIC D	DISTORTION	(Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)								
NPUT	EFFICIENCY (Typ.	)	87%	89%	90.5%	91%	91%	91%	91%	91.5%	91.5%
	AC CURRENT	347VAC	0.45A	0.5A							
	(Typ.)	480VAC	0.35A	0.38A							
	INRUSH CURRENT	Г (Тур.)	COLD START	35A(twidth=790)	μs measured at	t 50% Ipeak) at 4	480VAC; Per NE	MA 410			
	MAX. No. of PSUs CIRCUIT BREAKE		4 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 480VAC								
			<pre>&lt; 0.75mA / 480VAC</pre>								
	LEAKAGE CURRENT										
	OVER CURRENT		95 ~ 108%								
	OLIOPE OIDOUIT		Constant current limiting, recovers automatically after fault condition is removed								
PROTECTION	SHORT CIRCUIT		Constant current limiting, recovers automatically after fault condition is removed  14.4 ~ 16.8V   18 ~ 21V   23 ~ 27V   28 ~ 34V   34 ~ 38V   41 ~ 46V   47 ~ 53V   54 ~ 60V   59 ~ 65V								
	OVER VOLTAGE		14.4 ~ 16.8V   18 ~ 21V   23 ~ 27V   28 ~ 34V   34 ~ 38V   41 ~ 46V   47 ~ 53V   54 ~ 60V   59 ~ 65V   Shut down o/p voltage with auto-recovery or re-power on to recovery								
	OVED TEMPEDATI	UDE	Shut down o/p voltage with auto-recovery or re-power on to recovery  Shut down o/p voltage, recovers automatically after temperature goes down								
	OVER TEMPERAT	UKE	Tcase=-40 ~ +85°C (-40 ~ +75°C for 12V model, -40 ~ +80°C for 15V model)(Please refer to "OUTPUT LOAD vs TEMPERATURE" section								
	WORKING TEMP.	Tcase=+85°C (+75°C for 12V model, +80°C for 15V model)									
	MAX. CASE TEMP.		20 ~ 95% RH non-condensing								
ENVIRONMENT	WORKING HUMIDITY		20 ~ +80℃, 10 ~ 95% RH								
	STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT										
		N I	±0.03%°C (0 ~ 60°C)								
	VIBRATION	DC N	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750(type"HL"), CSA C22.2 No. 250.0-08, EAC TP TC 004, IP65 or IP67 approved								
	SAFETY STANDAR										
SAFETY &	WITHSTAND VOLTAGE ISOLATION RESISTANCE		I/P-O/P:3.75KVAC   I/P-FG:2KVAC   O/P-FG:1.5KVAC   I/P-O/P, I/P-FG; O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
EMC	ISOLATION RESISTANCE								l., fan 10\ /	-1.	
	EMC EMISSION		Compliance to EN55015, EN61000-3-2 Class C (@ load≥55% load,@ load≥60% only for 12V model ) ; EN61000-3-3, FCC Part 15 Subpart,EAC TP TC 020								
	EMC IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV), EAC TP TC 020								
	MTDE		1796.5K hrs min. Telcordia SR-332(Bellcore) ; 158.6K hrs min. MIL-HDBK-217F (25°C)								
	MTBF		245*68*38.8mm (L*W*H)								
OTHERS	DIMENSION		245*68*38.8m	nm (L*W*H)							
OTHERS				nm (L*W*H) s/15.9Kg/0.780	CUFT						

- 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 and load regulation.

  4. Please refer to "DRIVING METHODS OF LED MODULE".

  5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.

  6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.

  7. The driver 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 manufacturers must re-qualify EMC Directive on the complete installation again.

  (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)

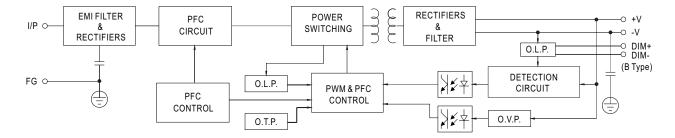
  8. This series meets the typical life expectancy of >50,000 hours of operation when Tapes particularly (as a TAP) and DLO is a facult of the complete installation.

- (as available of https://www.meanwell.com//pload/PDF/EIN]\_statement\_ein.pdf)
  8. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (to point (or TMP, per DLC), is about 75°C or less.
  9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com.
  10. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
  11. For any application note and IP water proof function installation caution, please refer our user manual before using.

  https://www.meanwell.com/Upload/PDF/LED\_EN.pdf
- 12. For A/AB type need to consider build in using to comply with Type HL application.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

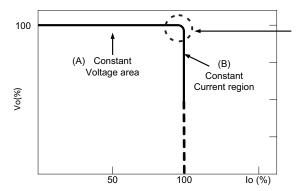
## **■** Block Diagram

PFC fosc: 130KHz PWM fosc: 70KHz



## **■** DRIVING METHODS OF LED MODULE

X This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.



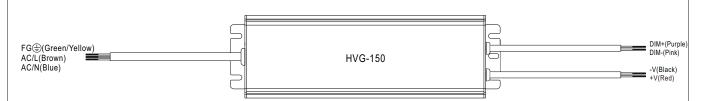
Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

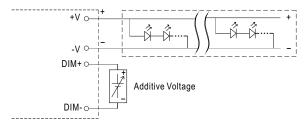


## **■ DIMMING OPERATION**



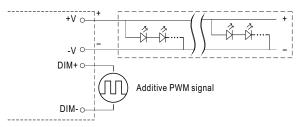
#### ※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM: 0 ~ 10VDC, or 10V PWM signal or resistance.
- · Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply:  $100\mu A$  (typ.)
- O Applying additive 0 ~ 10VDC



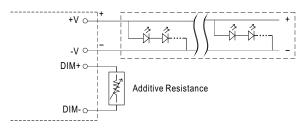
"DO NOT connect "DIM- to -V"

O Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):

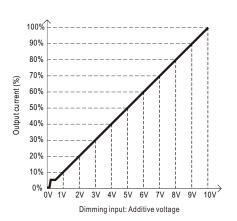


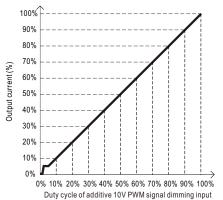
"DO NOT connect "DIM- to -V"

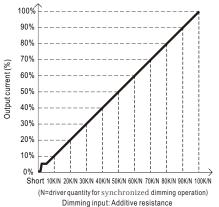
O Applying additive resistance:



"DO NOT connect "DIM- to -V"



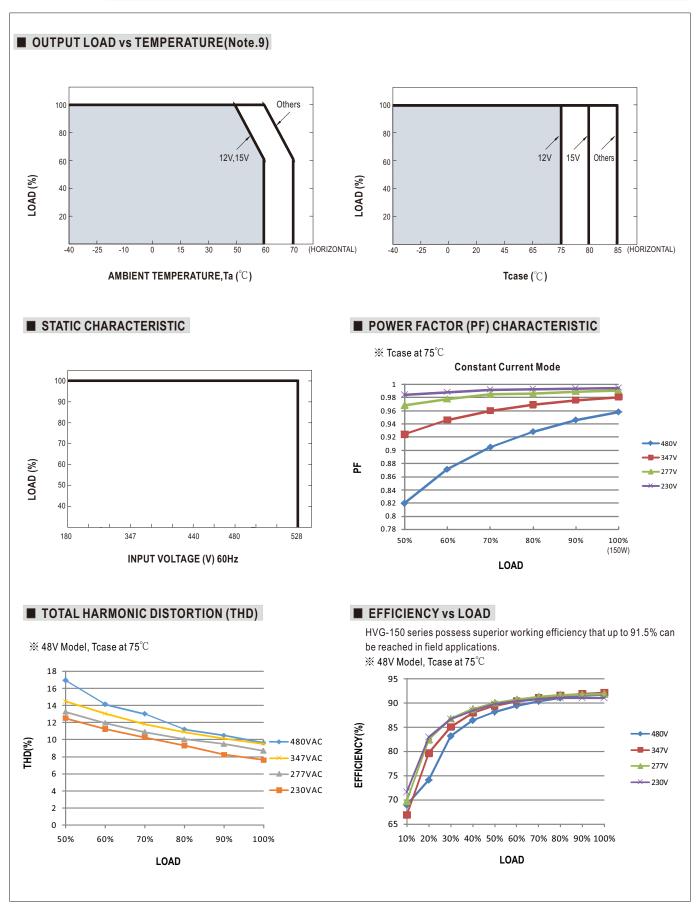




Note: 1. Min. dimming level is about 6% and the output current is not defined when 0% < Iout < 6%.

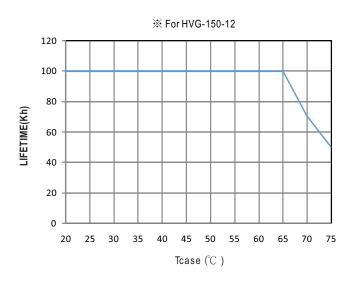
2. The output current could drop down to 0% when dimming input is about 0kΩ or 0Vdc, or 10V PWM signal with 0% duty cycle.

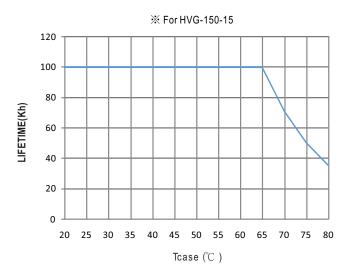


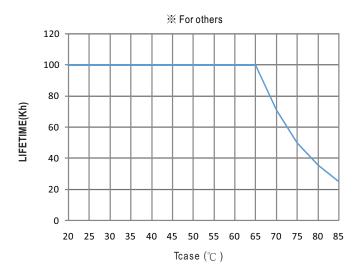




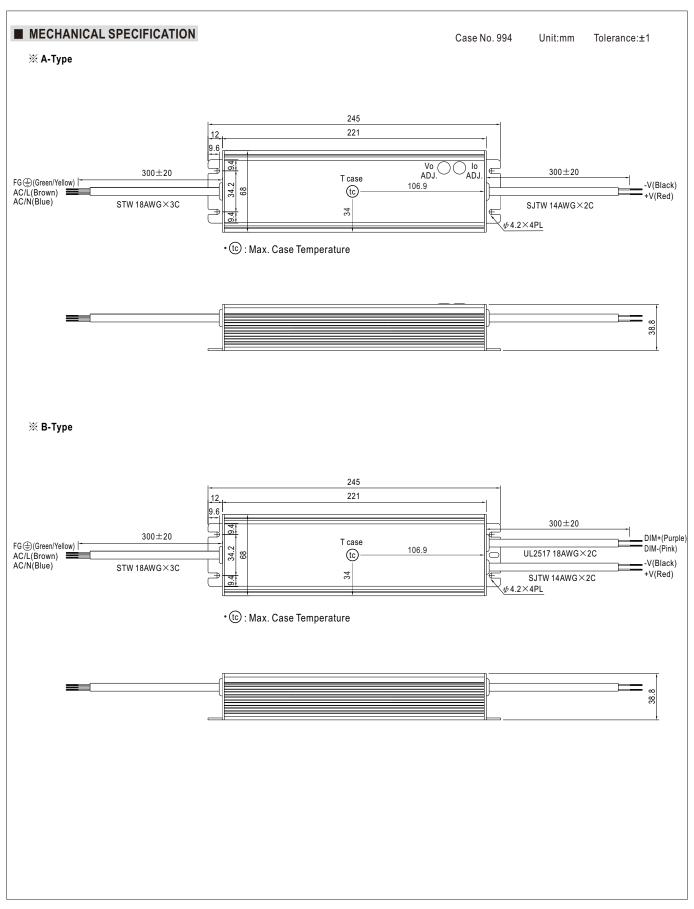
# ■ LIFE TIME



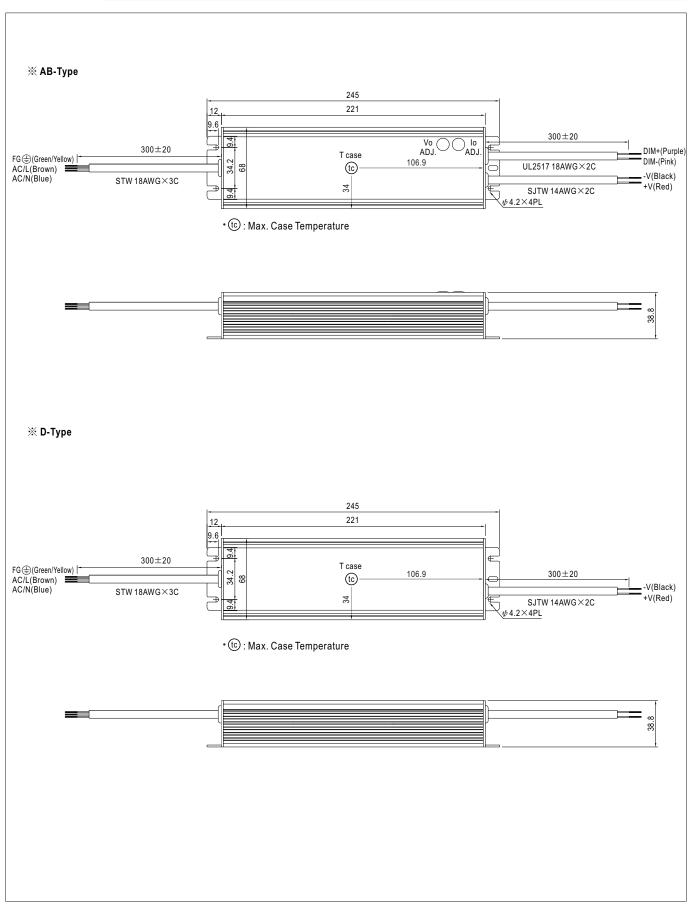




# HVG-150 series







LED Lamp

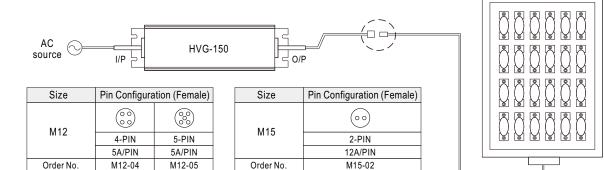
# 150W Constant Voltage + Constant Current LED Driver

## ■ WATERPROOF CONNECTION

#### **X** Waterproof connector

Waterproof connector can be assembled on the output cable of HVG-150 to operate in dry/wet/damp or outdoor environment.

Suitable Current

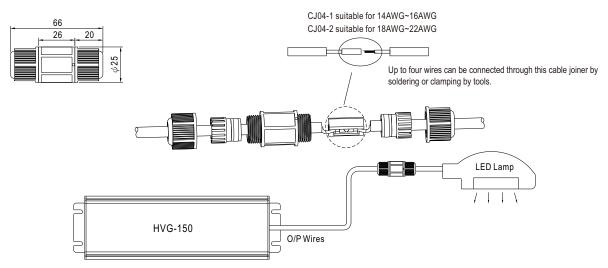


#### **X** Cable Joiner

Suitable Current

10A max.

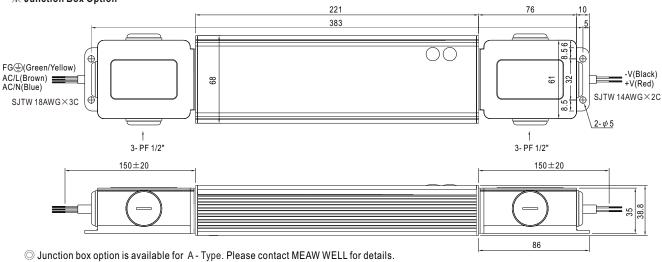
10A max.



12A max

CJ04 cable joiner can be purchased independently for user's own assembly. MEAN WELL order No.: CJ04-1, CJ04-2.





## ■ INSTALLATION MANUAL

Please refer to : http://www.meanwell.com/manual.html