■ Features :





- · Constant current design
- Wide input range 180~528VAC
- · Built-in active PFC function
- High efficiency up to 91%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- · OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Three in one dimming function (0~10Vdc or 10V PWM signal or resistance)
- Suitable for LED lighting and street lighting applications
- · Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.6)



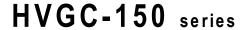
 $\label{eq:hvgc-150-350} \text{A} : \text{IP65 rated. Constant current level can be adjusted through internal potentiometer.}$ 

B: IP67 rated. Constant current level adjustable through output cable with 0~10Vdc or 10V PWM signal or resistance.

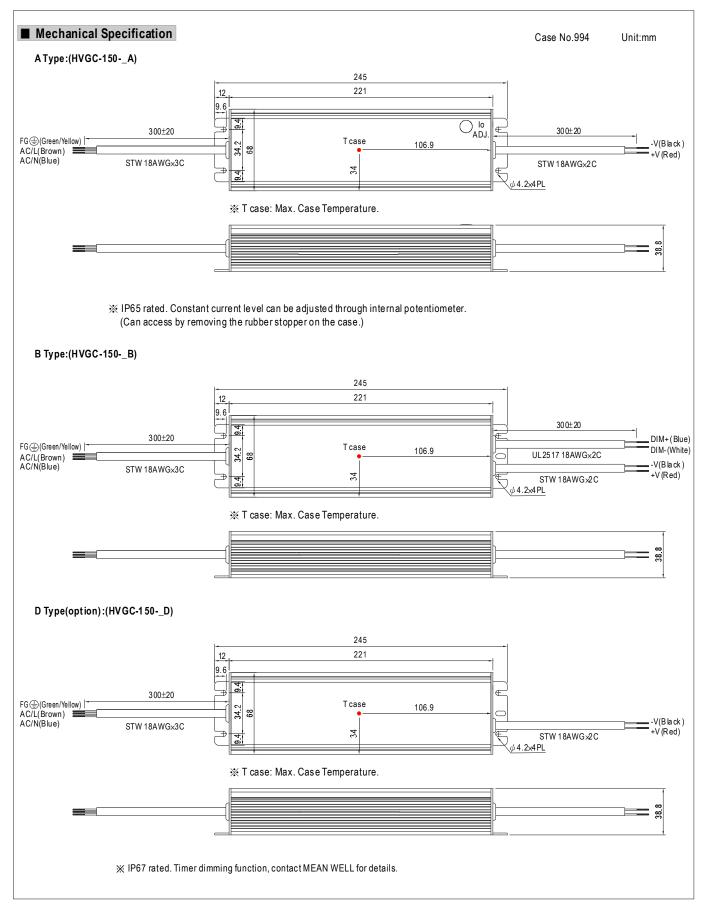
D (option): IP67 rated. Timer dimming function, contact MEAN WELL for details.

#### **SPECIFICATION**

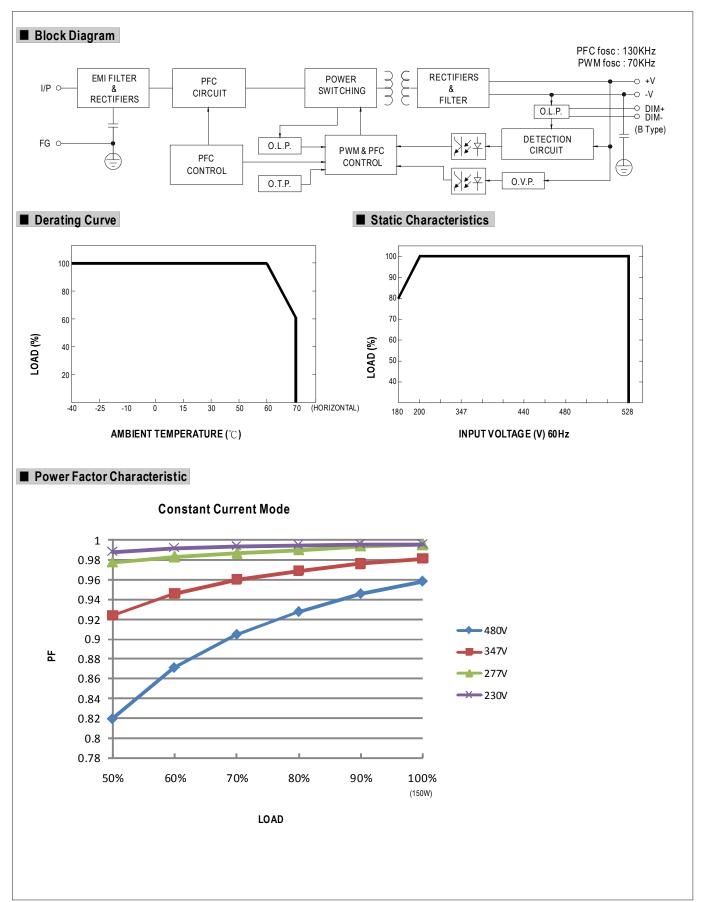
MODEL		HVGC-150-350	HVGC-150-500	HVGC-150-700	HVGC-150-1050	HVGC-150-1400				
	RATED CURRENT	350 mA	500mA	700mA	1050mA	1400mA				
	CURRENT ACCURACY	±5.0%								
	MAX. OUTPUT VOLTAGE	42 ~ 428V	30 ~ 300V	21 ~ 215V	15 ~ 143V	12 ~ 107V				
	RATED POWER	149.8W	150W	150.5W	150.15W	149.8W				
OUTPUT	RIPPLE & NOISE (max.) Note.2	2Vp-p	1.5Vp-p	1Vp-p	0.7Vp-p	0.5Vp-p				
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer A type only								
	CURRENT ADJ. RANGE	210 ~ 350mA	300 ~ 500mA	420 ~ 700mA	630 ~ 1050mA	840 ~ 1400mA				
	<b>SETUP, RISE TIME</b> 2700ms, 150ms at full load 480VAC / 347VAC; B type 5000ms, 150ms at 95% load 480VAC / 347VAC									
	HOLD UP TIME (Typ.)	18ms at full load 480VAC / 347VAC								
	VOLTAGE RANGE Note.3	180 ~ 528VAC 254V	DC ~ 747 VDC							
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	$PF \ge 0.98/230VAC$ , $PF \ge 0.97/277VAC$ , $PF \ge 0.95/347VAC$ , $PF \ge 0.93/480VAC$ at full load (Please refer to "Power Factor Characteristic" curve)								
INPUT	EFFICIENCY (Typ.)	91%	91%	91%	90%	90%				
	AC CURRENT (Typ.)	0.5A / 347VAC 0.38	A / 480VAC							
	INRUSH CURRENT (Typ.)	COLD START 35A(twidth=7	$'90\mu$ s measured at 50% lps	eak) at 480VAC						
	LEAKAGE CURRENT	<0.75mA / 480 VAC								
	SHORT CIRCUIT	Constant current limiting,	recovers automatically aff	er fault condition is remov	ved					
	OVEDVOLTACE	430 ~ 460 V	316 ~ 346V	226 ~ 247V	151 ~ 165V	113 ~ 124V				
PROTECTION	OVER VOLTAGE	Protection type: Shut down o/p voltage with auto-recovery or re-power on to recovery								
	OVER TEMPERATURE	95℃ ±10℃ (RTH2)								
	OVERTEWIPERATURE	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down								
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY 20 ~ 95% RH non-condensing									
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RI	4							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)								
	VIBRATION	10 ~ 500Hz, 5G 12min./1	cycle, period for 72min. ea	ach along X, Y, Z axes						
	SAFETY STANDARDS Note.4	UL8750, CSA C22.2 No. 2	250.0-08, TUV EN61347-1	, EN61347-2-13, IP65 or	IP67 approved					
SAFETY&	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P	-FG:2KVAC O/P-FG:0.	5KVAC						
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG	:100M Ohms / 500VDC / :	25°C / 70% RH						
LINIC	EMC EMISSION	Compliance to EN55015,	EN61000-3-2 Class C (≥	50% load); EN61000-3-3	3, FCC part 15 class B					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (surge 4KV), criteria A								
	MTBF	179.5K hrs min. MIL-H	DBK-217F (25°C)							
OTHERS	DIMENSION	245*68*38.8mm (L*W*H)								
	PACKING	1.24Kg; 12pcs/15.9Kg/0.78CUFT								
NOTE	All parameters NOT special     Ripple & noise are measure     Derating may be needed ure     Safety and EMC design reference of the power supply is considered complete installation, the fine.     Refer to warranty statemen	ed at 20MHz of bandwidth nder low input voltages. P er to EN60598-1, CNS15; ered as a component that nal equipment manufacture	by using a 12" twisted p lease check the static cha 233, GB7000.1. will be operated in comb	air-wire terminated with a aracteristics for more det sination with final equipm	a 0.1uf parallel capacitor. ails. ent. Since EMC performa	nce will be affected by the				







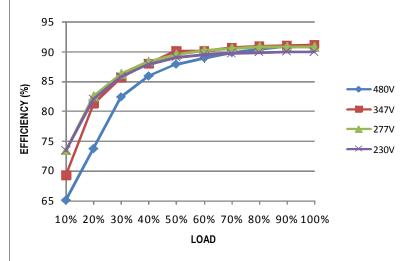






## ■ EFFICIENCY vs LOAD (HVGC-150-350 Model)

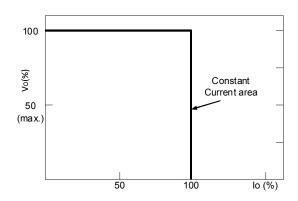
HVGC-150 series possess superior working efficiency that up to 91% can be reached in field applications.



## ■ DRIVING METHODS OF LED MODULE

A typical LED power supply may w ork in "constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CC characteristic can be operated at CC mode (direct drive).



Typical LED power supply I-V curve



## ■ DIMMING OPERATION



- $\times$  Please DO NOT connect "DIM-" to "-V".
- \*\* Reference resistance value for output current adjustment (Typical)

Resistance	Single driver	Short	10K $\Omega$	<b>20K</b> Ω	$30$ K $\Omega$	$40 \mathrm{K}\Omega$	$50$ Κ $\Omega$	$60$ K $\Omega$	70K $\Omega$	$80$ K $\Omega$	<b>90K</b> Ω	$100 \text{K}\Omega$	OPEN
value	Multiple drivers (N=driver quantity for synchronized dimming operation)	Short	10KΩ <i>I</i> N	20K Ω/N	30K Ω/N	40KΩ/N	50K Ω/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100KΩ/N	
Percenta	ige of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

#### x 0 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	0 V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

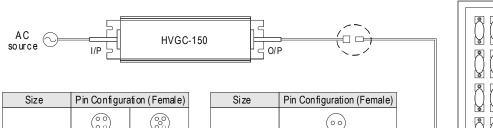
★ 10V PWM signal for output current adjustment (Typical): Frequency range: 100Hz ~ 3KHz

Duty value	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

## ■ WATERPROOF CONNECTION

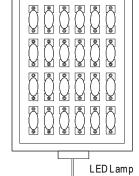
Waterproof connector

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

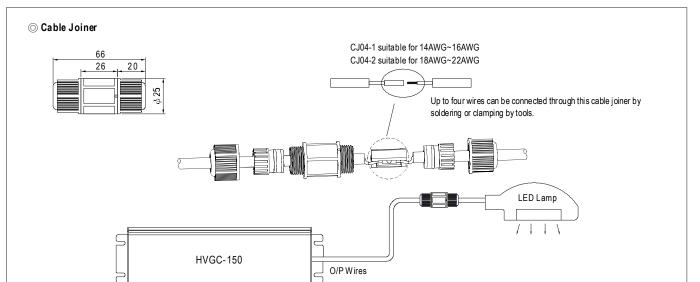


	3	( /		
M12	000	000		
IVIIZ	4-PIN	5-PIN		
	5A/P IN	5A/PIN		
Order No.	M12-04	M12-05		
Suitable Current	10A max.	10A max.		

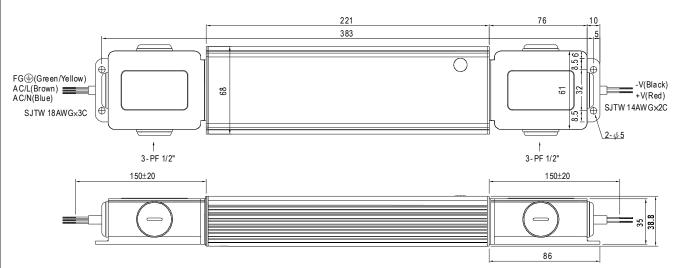
Size	Pin Configuration (Female)					
M 15	00					
IVI IO	2-PIN					
	12A/P IN					
Order No.	M15-02					
Suitable Current	12A max.					







## 



 $\times$ Optional junction box available for A - type, please contact MEAW WELL for details.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Mean Well:

<u>HVGC-150-1050A</u> <u>HVGC-150-1050B</u> <u>HVGC-150-1400A</u> <u>HVGC-150-1400B</u> <u>HVGC-150-350A</u> <u>HVGC-150-350B</u> HVGC-150-500A HVGC-150-500B HVGC-150-700A HVGC-150-700B