

240W Single Output Switching Power Supply

HLG-240H series



Features :

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Over current / 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 (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and street lighting applications

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- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)

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TAIWAN
EXCELLENCE 201

HLG-240H-12 A Blank : IP67 rated. Cable for I/O connection.

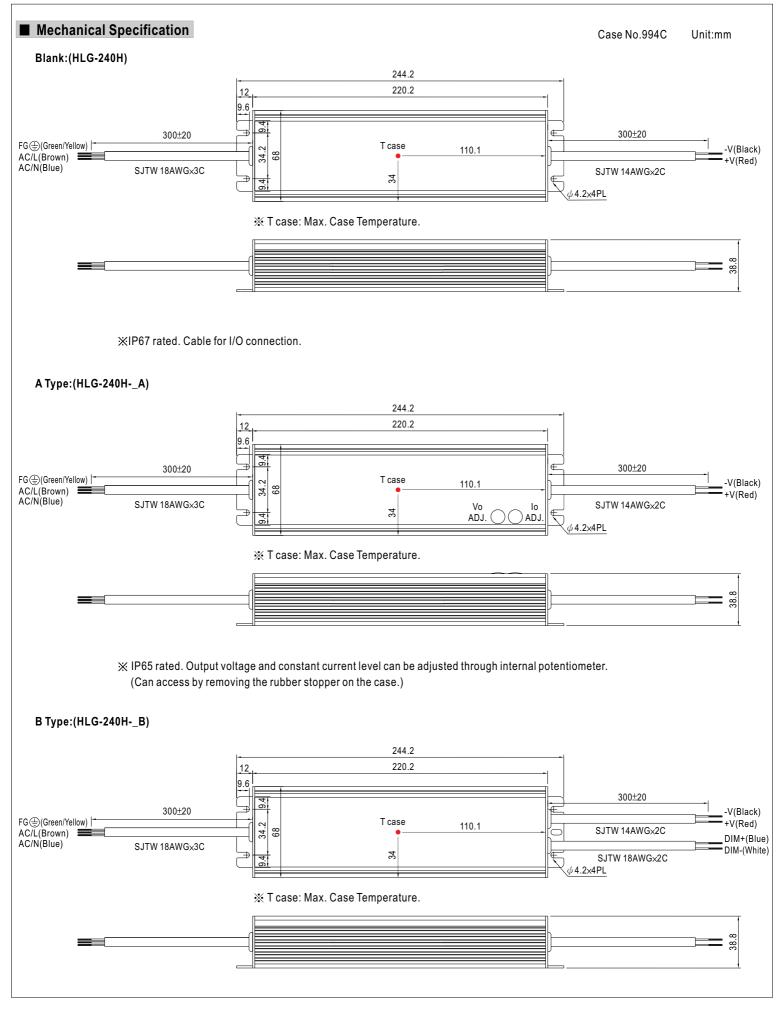
- A : IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
- B : IP67 rated. Constant current level adjustable through output cable with 1~10Vdc or 10V PWM signal or resistance.
- C : Terminal block for I/O connection. Output voltage and constant current level can be adjusted through internal potentiometer.
- D (option) : IP67 rated. Timer dimming function, contact MEAN WELL for details.

SPECIFICATION

MODEL		HLG-240H-12	HLG-240H-15	HLG-240H-20	HLG-240H-24	HLG-240H-30	HLG-240H-36	HLG-240H-42	HLG-240H-48	HLG-240H-54		
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V		
OUTPUT	CONSTANT CURRENT REGION Note.4		7.5 ~ 15V	10~20V	12~24V	15~30V	18~36V	21~42V	24~48V	27 ~ 54V		
	RATED CURRENT	16A	15A	10 20V	10A	8A	6.7A	5.72A	5A	4.45A		
	RATED POWER	192W	225W	240W	240W	240W	241.2W	240.24W	240W	240.3W		
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p		
	VOLTAGE ADJ. RANGE Note.6								44.8 ~ 51.2V	50 ~ 57V		
	VOLIAGE ADJ. RANGE Note.6	11.2 ~ 12.8V 14 ~ 16V 18.6 ~ 21.4V 22.4 ~ 25.6V 28 ~ 32V 33.5 ~ 38.5V 39 ~ 45V 44.8 ~ 51.2V 50 ~ 57V Can be adjusted by internal potentiometer or through output cable										
	CURRENT ADJ. RANGE											
	VOLTAGE TOLERANCE Note.3		7.5 ~ 15A ±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%			
	LINE REGULATION						±0.5%			±1.0%		
		±0.5% ±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5% ±0.5%	±0.5%	±0.5%		
			±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
		2500ms, 80m			AC							
	HOLD UP TIME (Typ.)		ad 230VAC									
		90~305VAC 127~431VDC										
	FREQUENCY RANGE	47 ~ 63Hz										
	POWER FACTOR (Typ.)		-		i i	fer to "Power F		,	[1		
INPUT	EFFICIENCY (Typ.)	90%	90%	92%	93%	93%	93%	93%	93.5%	94%		
	AC CURRENT (Typ.)	4A / 115VAC 2A / 230VAC 1.2A / 277VAC										
	INRUSH CURRENT (Typ.)		COLD START 75A/230VAC									
	LEAKAGE CURRENT	<0.75mA/27	<0.75mA/277VAC									
	OVER CURRENT Note.4	95 ~ 108%										
		Protection type : Constant current limiting, recovers automatically after fault condition is removed										
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed										
PROTECTION		13.5 ~ 18V	17.5 ~ 21.5V	23.5~27.5V	27 ~ 34V	33 ~ 39V	43~49V	48 ~ 54V	55~63V	60~67V		
	OVER VOLTAGE	Protection typ	e : Shut down	and latch off o/	p voltage, re-p	ower on to reco	over					
		105℃ ±5℃ (TSW1) 95℃ ±5℃ (TSW1)										
	OVER TEMPERATURE	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% RH										
	TEMP. COEFFICIENT	±0.03%/°C (0	±0.03%/°C (0 ~ 50°C)									
	VIBRATION	10~500Hz, 5	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes									
		UL1012_CAN/CSA-C22.2 No. 107.1-01_UL8750_CSA C22.2 No. 250.0-08_TUV EN61347-1_EN61347-2-13 independent										
	SAFETY STANDARDS Note.7	(except for HLG-240H C type), UL60950-1, UL8750, TUV EN60950-1, IP65 or IP67 approved, J61347-1, J61347-2-13										
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC										
EMC	ISOLATION RESISTANCE		I/P-O/P. J./P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH									
	EMC EMISSION		Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≥50% load) ; EN61000-3-3									
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A										
	MTBF	207.9Khrs min. MIL-HDBK-217F (25°C)										
OTHERS	DIMENSION	244.2*68*38.8mm (L*W*H)(HLG-240H-Blank/A/B) 251*68*38.8mm (L*W*H)(HLG-240H-C)										
•	PACKING	1.3Kq; 12pcs/16.6Kq/0.84CUFT(HLG-240-Blank/A/B) 1.23Kq; 12pcs/16.6Kq/0.84CUFT(HLG-240-Blank/A/B) 1.23Kq; 12pcs/15.8Kq/1.16CUFT(HLG-240-C)										
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NOTE	2. Ripple & noise are measure	arameters NOT specially mentioned are measured at 230VAC input, rated load and 25° C of ambient temperature. e & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.										
		p tolerance, line regulation and load regulation.										
		on region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please cal requirements for some specific system design. d under low input voltages. Please check the static characteristics for more details.										
	5. Derating may be needed ur											
	6. Type A and type C only.	for to ENCOEDD 1 autoost 07ED/UII) CNIC4E000 CD7000 1 ECC										
		ifer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18. easured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.										
	9. The power supply is conside	idered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the								ected by the		
		al equipment manufacturers must re-qualify EMC Directive on the complete installation again.										
	10. Refer to warranty statement.											

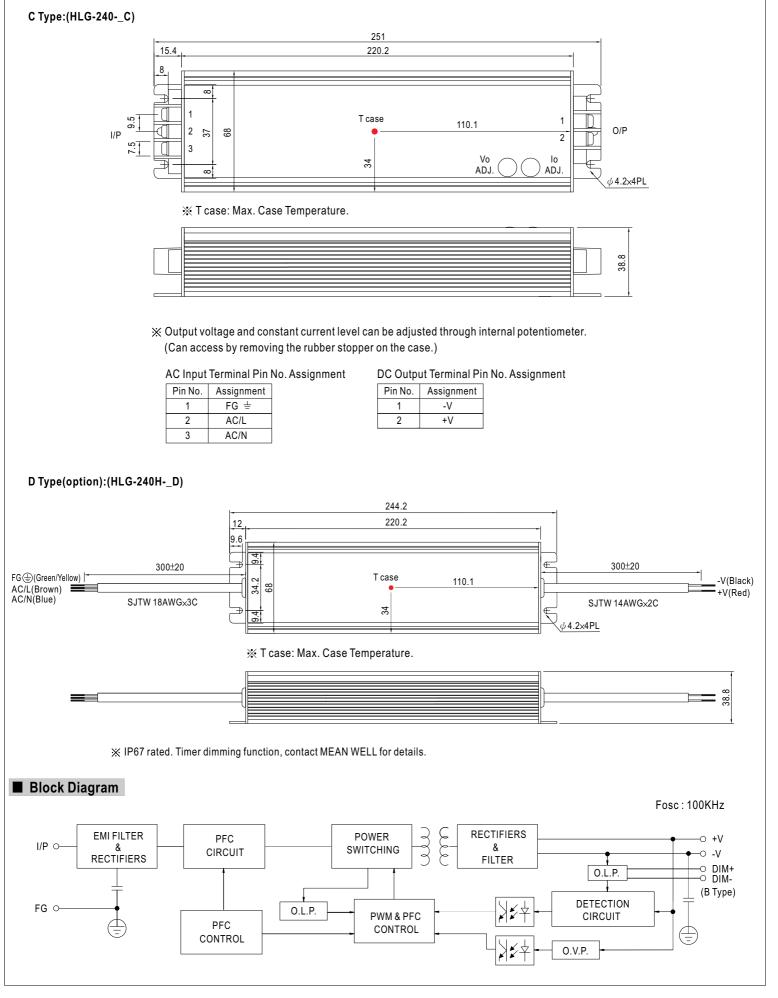


HLG-240H series



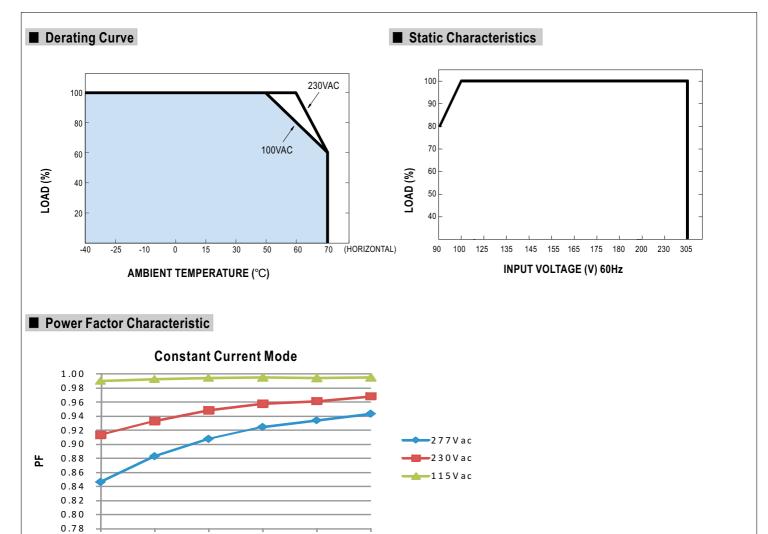


HLG-240H series





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■ EFFICIENCY vs LOAD (48V Model)

60%

70%

50%

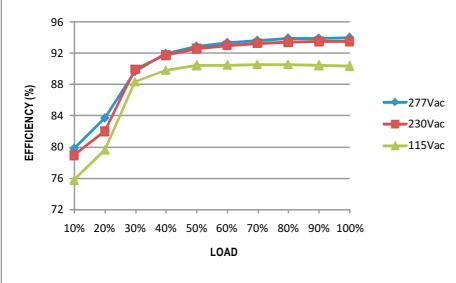
 $HLG-240H\ series\ possess\ superior\ working\ efficiency\ that\ up\ to\ 93.5\%\ can\ be\ reached\ in\ field\ applications.$

90%

100% (240W)

80%

LOAD



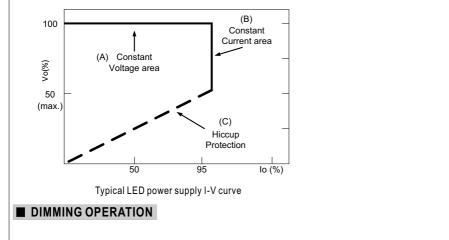


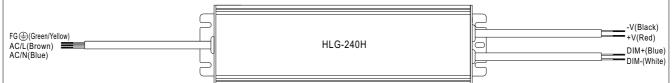
DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).





※ Built-in 3 in 1 dimming function, IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistance or 1 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

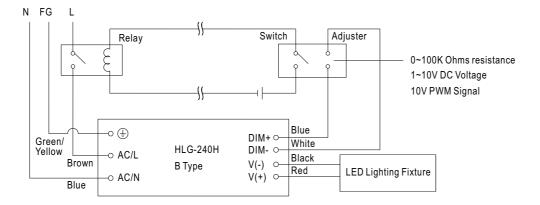
※ Please DO NOT connect "DIM-" to "-V".

※ Reference resistance value for output current adjustment (Typical)

Resistance value	Single driver	10Κ Ω	20Κ Ω	30Κ Ω	40K Ω	50Κ Ω	60Κ Ω	70Κ Ω	80K Ω	90Κ Ω	100K Ω	OPEN
	Multiple drivers (N=driver quantity for synchronized dimming operation)	10KΩ/N	20K Ω/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80K Ω/N	90KΩ/N	100KΩ/N	
Percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~105%	
× 1 ~ 10V dimming function for output current adjustment (Typical)												
Dimming value		1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~105%
× 10V PWM signal for output current adjustment (Typical): Frequency range :100Hz ~ 3KHz												
Duty value		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~105%

XUsing the built-in dimming function on B-type model can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

Dimming connection diagram for turning the lighting fixture ON/OFF :

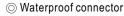


Using a switch and relay can turn ON/OFF the lighting fixture.

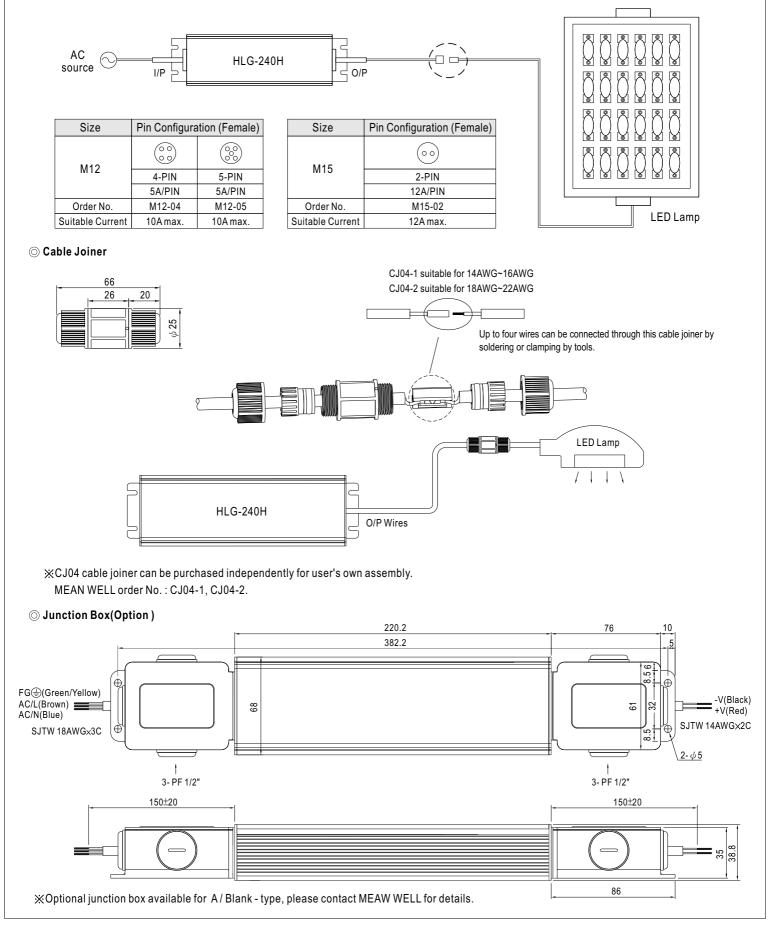
1. Output constant current level can be adjusted through output cable by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-. 2. The LED lighting fixture can be turned ON/OFF by the switch.



■ WATERPROOF CONNECTION



Waterproof connector can be assembled on the output cable of HLG-240H to operate in dry/wet/damp or outdoor environment.



Mouser Electronics

Authorized Distributor

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Mean Well:

 HLG-240H-12A
 HLG-240H-15A
 HLG-240H-20A
 HLG-240H-24A
 HLG-240H-30A
 HLG-240H-36A
 HLG-240H-42A

 HLG-240H-48A
 HLG-240H-54A
 HLG-240H-12
 HLG-240H-12B
 HLG-240H-12C
 HLG-240H-15
 HLG-240H-15B

 HLG-240H-15C
 HLG-240H-20
 HLG-240H-20B
 HLG-240H-20C
 HLG-240H-24
 HLG-240H-24B
 HLG-240H-24C

 HLG-240H-30
 HLG-240H-30B
 HLG-240H-30C
 HLG-240H-36B
 HLG-240H-36C
 HLG-240H-42
 HLG-240H-42

 240H-42B
 HLG-240H-42C
 HLG-240H-48
 HLG-240H-48B
 HLG-240H-48C
 HLG-240H-54B
 HLG-240H-54B

 240H-54C
 HLG-240H-42C
 HLG-240H-48
 HLG-240H-48B
 HLG-240H-48C
 HLG-240H-54B
 HLG-240H-54B