



■ Features :

- Universal AC input / Full range
- 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
- · Compliance to worldwide safety regulations for lighting
- * Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)





















HLG-240-12 A

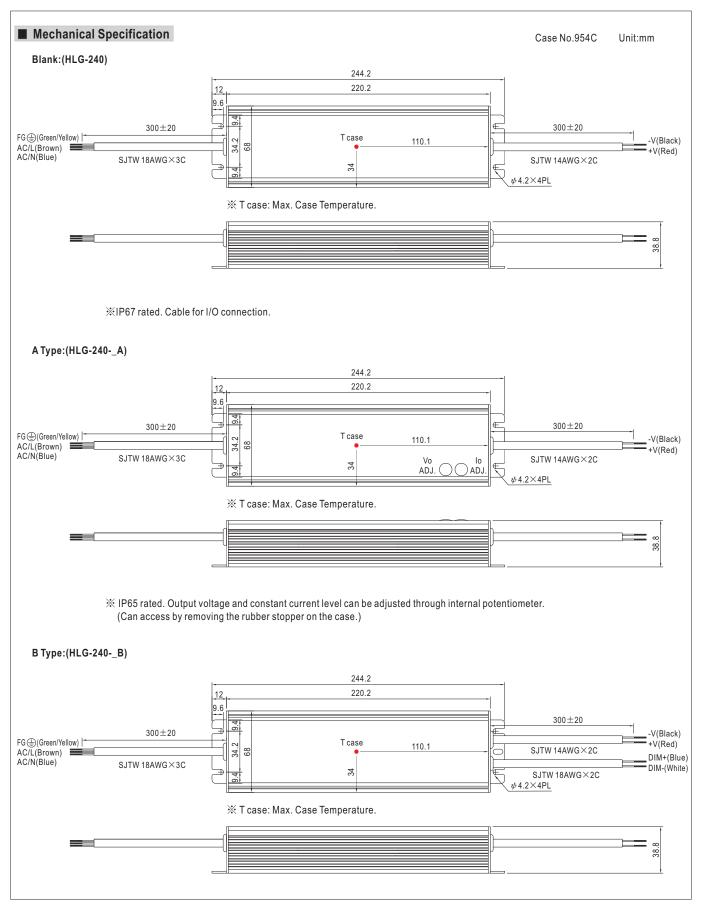
Blank: IP67 rated. Cable for I/O connection.

- 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, safety pending): IP67 rated. Timer dimming function, contact MEAN WELL for details.

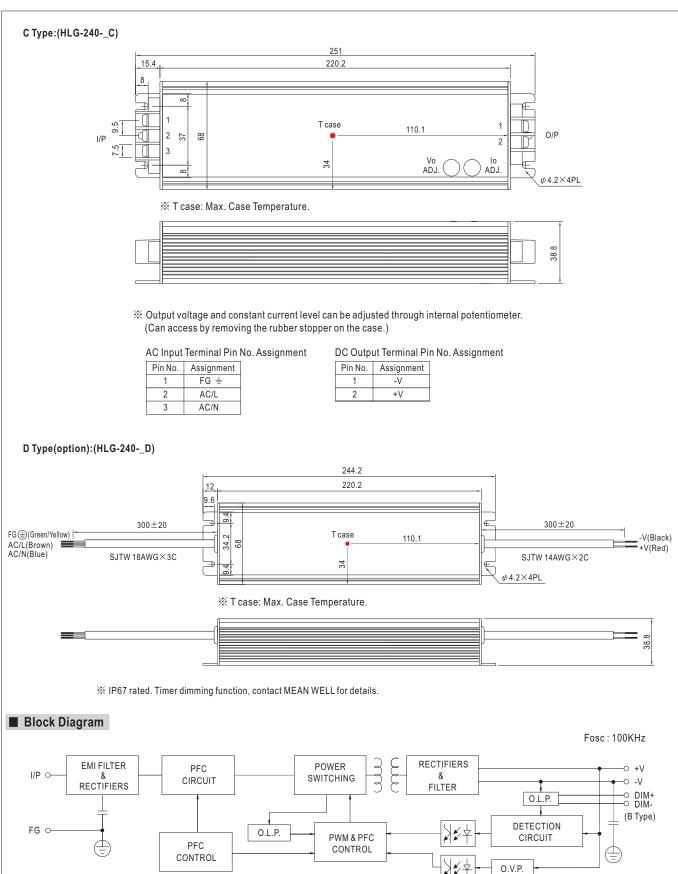
SPECIFICATION

MODEL		HLG-240-12	HLG-240-15	HLG-240-20	HLG-240-24	HLG-240-30	HLG-240-36	HLG-240-42	HLG-240-48	HLG-240-54				
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V				
	CONSTANT CURRENT REGION Note.4	6 ~12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V				
	RATED CURRENT	16A	15A	12A	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	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p				
	VOLTAGE ADJ. RANGE Note.6		14 ~ 16V		22.4 ~ 25.6V		33.5 ~ 38.5V	39 ~ 45V	44.8 ~ 51.2V	50 ~ 57V				
OUTPUT			ed by internal r	ootentiometer A										
	CURRENT ADJ. RANGE	8 ~ 16A	7.5 ~ 15A	6 ~ 12A	5 ~ 10A	4 ~ 8A	3.3 ~ 6.7A	2.86 ~ 5.72A	2.5 ~ 5A	2.23 ~ 4.45				
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%				
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%				
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%				
		2500ms, 80ms at full load 230VAC /115VAC												
	HOLD UP TIME (Typ.)	15ms at full load 230VAC /115VAC												
		90 ~ 264VAC	127 ~ 373											
	FREQUENCY RANGE	47 ~ 63Hz	127 070	7100										
	POWER FACTOR (Typ.)		AC. PF>0.95/2	230VAC at full I	oad (Please re	fer to "Power F	actor Characte	eristic" curve)						
INPUT	EFFICIENCY (Typ.)	90%	90%	91.5%	92.5%	92.5%	92.5%	92.5%	93%	93.5%				
• .	AC CURRENT (Typ.)	4A / 115VAC	2A / 230V		02.070	02.070	02.070	02.070	1 3 70	20.070				
	INRUSH CURRENT (Typ.)	COLD START 75A(twidth=570 µs measured at 50% lpeak) at 230VAC												
	LEAKAGE CURRENT	COLD START 75A(Invidin=570 μs measured at 50% Ipeak) at 230VAC												
	ELMINIOL GOMMENT	95 ~ 108%												
	OVER CURRENT Note.4	Protection type: Constant current limiting, recovers automatically after fault condition is removed												
	SHODT CIDCUIT	Hiccup mode, recovers automatically after fault condition is removed												
PROTECTION	SHORT CIRCUIT	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 type : Shut down and latch off o/p voltage, re-power on to recover												
	OVED TEMPEDATURE	Shut down o/p voltage, recovers automatically after temperature goes down												
	OVER TEMPERATURE				ically after tell	iperature goes	down							
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")												
FWWDOWNENT	WORKING HUMIDITY	20 ~ 95% RH non-condensing -40 ~ +80°C, 10 ~ 95% RH												
ENVIRONMENT	STORAGE TEMP., HUMIDITY	,												
	TEMP. COEFFICIENT	±0.03%/°C (V V 7								
	VIBRATION			le, period for 7										
	SAFETY STANDARDS Note.7								61347-2-13 ind	'				
			• • • • • • • • • • • • • • • • • • • •	,			P65 or IP67, J	61347-1, J613	347-2-13 appro	oved				
SAFETY &	WITHSTAND VOLTAGE			G:2KVAC O/										
EMC	ISOLATION RESISTANCE	,		00M Ohms / 50										
	EMC EMISSION			155022 (CISPR			•							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A												
	MTBF	207.9K hrs mi		8K-217F (25°C)		1+00+00 -	1 414/41 (\ '' '' * * * *	140.0)						
OTHERS	DIMENSION		, ,,	HLG-240-Blank	,	1*68*38.8mm (, ,	,	0.0					
	PACKING			JFT(HLG-240-		0, 1		CUFT(HLG-24	·U-C)					
NOTE	All parameters NOT special Ripple & noise are measure Tolerance : includes set up Please refer to "DRIVING N Derating may be needed ur A type and C type only. Safety and EMC design refe Length of set up time is me. The power supply is considict complete installation, the fin D. Refer to warranty statement	ed at 20MHz of tolerance, line IETHODS OF oder low input ver to EN60598-assured at cold ered as a compal equipment in	bandwidth by regulation and LED MODULE voltages. Please 1, subject 875 first start. Turroonent that will	r using a 12" to d load regulation E". se check the si 50(UL), CNS15 hing ON/OFF ti Il be operated	visted pair-wire on. tatic characteri 5233, GB7000. he power supp in combination	e terminated w stics for more 1, FCC part18 bly may lead to with final equi	details. increase of the pment. Since	7uf parallel cap ne set up time. EMC performa		ected by the				

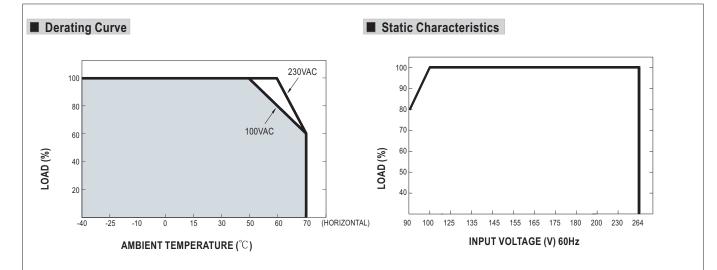




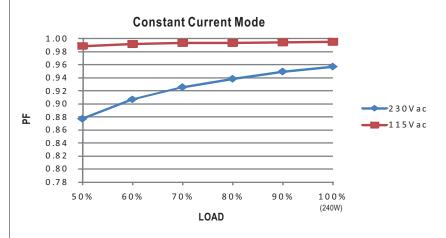






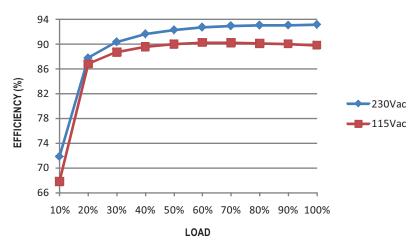


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (48V Model)

 $HLG-240\ series\ possess\ superior\ working\ efficiency\ that\ up\ to\ 94\%\ can\ be\ reached\ in\ field\ applications.$



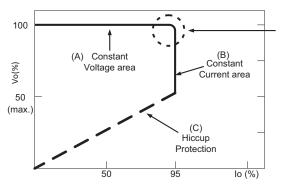


■ DRIVING METHODS OF LED MODULE

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).



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.

Typical LED power supply I-V curve

■ DIMMING OPERATION (for B-type only)



- 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	Single driver	10K Ω	20ΚΩ	$30 \mathrm{K}\Omega$	40K Ω	50K Ω	$60 \mathrm{K}\Omega$	70KΩ	80KΩ	90K Ω	100K Ω	OPEN
value	Multiple drivers (N=driver quantity for synchronized dimming operation)	10K Ω /N	20K Ω /N	30K Ω /N	40K Ω /N	50K Ω/N	60K Ω /N	70K Ω /N	80K Ω /N	90K Ω /N	100K Ω/N	
Percentage	e of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

X 1 ~ 10V dimming function for output current adjustment (Typical)

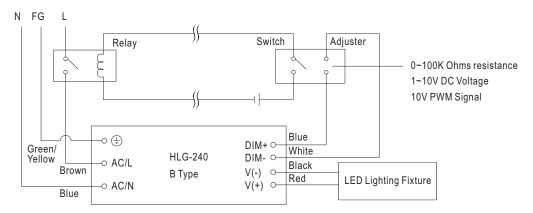
Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

¾ 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%~108%

- **Using 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.
- *Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

Dimming connection diagram for turning the lighting fixture $\mbox{ON/OFF}$:



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

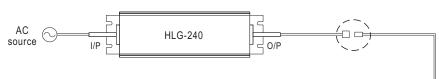
- 1.Output constant current level can be adjusted through output cable by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
- 2. The LED lighting fixture can be turned ON/OFF by the switch.



■ WATERPROOF CONNECTION

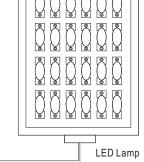
O Waterproof connector

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

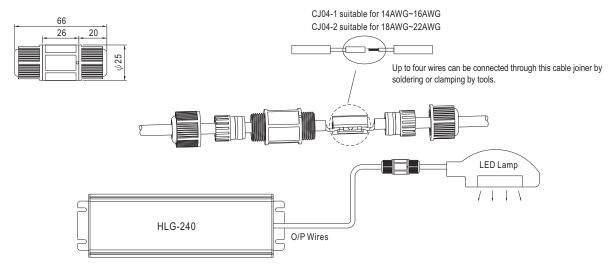


Size	Pin Configuration (Female)						
M12	000	000					
IVIIZ	4-PIN	5-PIN					
	5A/PIN	5A/PIN					
Order No.	M12-04	M12-05					
Suitable Current	10A max.	10A max.					

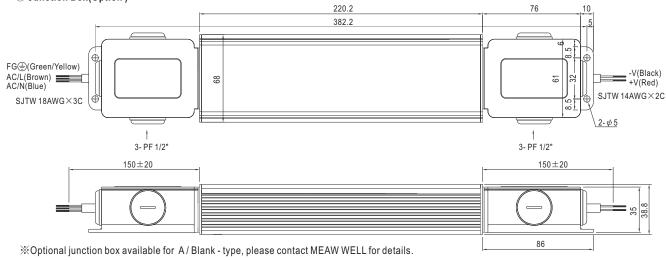
Size	Pin Configuration (Female					
M15	$\bigcirc \circ$					
IVITO	2-PIN					
	12A/PIN					
Order No.	M15-02					
Suitable Current	12A max.					



O Cable Joiner







Mouser Electronics

Authorized Distributor

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Mean Well:

HLG-240-12A HLG-240-15A HLG-240-20A HLG-240-24A HLG-240-30A HLG-240-36A HLG-240-42A HLG-240-42A HLG-240-42A HLG-240-54A HLG-240-12 HLG-240-12C HLG-240-15 HLG-240-15B HLG-240-15C HLG-240-20C HLG-240-24 HLG-240-24B HLG-240-24C HLG-240-30 HLG-240-30B HLG-240-30C HLG-240-36B HLG-240-36C HLG-240-42 HLG-240-42B HLG-240-42C HLG-240-48 HLG-240-48C HLG-240-54B HLG-240-54C