



HLG-150H series





















■ Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
 3 in 1 dimming
- Typical lifetime > 62000 hours
- 7 years warranty

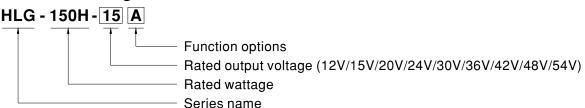
Applications

- 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.

Description

HLG-150H series is a 150W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-150H operates from $90 \sim 305$ VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40°C \sim +90°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. HLG-150H 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
Blank	IP67	Io and Vo fixed	In Stock
Α	IP65	Io and Vo adjustable through built-in potentiometer	In Stock
В	IP67	3 in 1 dimming function (1~10VDC, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



HLG-150H

SPECIFICATION

MODEL		HLG-150H-12	HLG-150H-15	HLG-150H-20	HLG-150H-24	HLG-150H-30	HLG-150H-36	HLG-150H-42	HLG-150H-48	HLG-150H-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
ОИТРИТ	RATED CURRENT	12.5A	10A	7.5A	6.3A	5A	4.2A	3.6A	3.2A	2.8A
	RATED POWER	150W	150W	150W	151.2W	150W	151.2W	151.2W	153.6W	151.2W
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	THE LE GINOIOE (Max.) Note.2	Adjustable for A/AB-Type only (via built-in potentiometer)								
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V		17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
				nly (via built-ir			33 4 0V	JU 40V	43 33 0	43 30 0
	CURRENT ADJ. RANGE	7.5 ~ 12.5A	6 ~ 10A	4.5 ~ 7.5A	3.8 ~ 6.3A	3 ~ 5A	2.5 ~ 4.2A	2.16 ~ 3.6A	1.92 ~ 3.2A	1.68 ~ 2.8A
	VOLTAGE TOLERANCE Note.3		±2.0%			±1.0%	±1.0%	±1.0%	±1.0%	
				±1.0%	±1.0%		±0.5%	±0.5%		±1.0%
	LINE REGULATION	±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%
		1000ms,200r		500ms,200ms	/230VAC					
	HOLD UP TIME (Typ.)	16ms / 115VAC, 230VAC								
	VOLTAGE RANGE Note.5	90 ~ 305VAC 127 ~ 431VDC								
		(Please refer to "STATIC CHARACTERISTIC" section)								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.92/277VAC @ full load								
	TOWERTACION (Typ.)	(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)								
	TOTAL HARMONIC DISTORTION	THD<20%(@ load≥60% / 115VAC,230VAC; @ load≥75% / 277VAC)								
INPUT	TOTAL HARMONIC DISTORTION	(Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)								
	EFFICIENCY (Typ.)	91.5%	92%	93%	93%	93.5%	93.5%	94%	94%	94%
	AC CURRENT (Typ.)	1.7A / 115VA	0.75A/	230VAC ().7A / 277VAC	•	•	•	•	•
	INRUSH CURRENT (Typ.)	COLD START	65A(twidth=425	μs measured at	t 50% Ipeak) at 2	230VAC; Per NE	EMA 410			
	MAX. No. of PSUs on 16A	4 units (circuit breaker of type B) / 7 units (circuit breaker of type C) at 230VAC								
	CIRCUIT BREAKER									
	LEAKAGE CURRENT	<0.75mA / 27	/ VAC							
	OVER CURRENT	95 ~ 108%								
		Constant current limiting, recovers automatically after fault condition is removed Constant current limiting, recovers automatically after fault condition is removed								
PROTECTION	SHORT CIRCUIT							T	T	
	OVER VOLTAGE	14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V
	OVER VOLINGE			auto-recovery o						
	OVER TEMPERATURE	Shut down o/p	o voltage, reco	vers automatic	ally after temp	erature goes do	own			
	WORKING TEMP.	Tcase= -40 ~	+90°C (Pleas	e refer to "OU"	TPUT LOAD ve	S TEMPERATU	IRE" section)			
	MAX. CASE TEMP.	Tcase= +90°				\mathcal{O}				
ENVIRONMENT	WORKING HUMIDITY	20 ~ 95% RH	non-condensir	ng						
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80℃,	10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)			_				
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes								
		UL8750(type"HL"), CSA C22.2 No. 250.0-08; EN/AS/NZS 61347-1, EN/AS/NZS 61347-2-13 independent; GB19510.1, GB19510.14;								
	SAFETY STANDARDS	IP65 or IP67; J61347-1, J61347-2-13,BIS IS15885(for 12B,24B,36A,54A only), EAC TP TC 004;								
		KC61347-1,KC61347-2-13(except for AB,D-type) approved; Design refer to UL60950-1, TUV EN60950-1								
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC								
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG; O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH								
	EMC EMISSION	Compliance to EN55015, EN55032 (CISPR32) Class B, EN61000-3-2 Class C (@ load≥60%) ; EN61000-3-3,								
	EMC IMMUNITY			AC TP TC 020		ight industry leve	l (surge immunit	v I ine-Farth 4K\	/ Line-Line 2K\/\	FAC TP TC 02
	MTBF	192.2K hrs mi		3K-217F (25°C)		igni maaati y 1646	· (ourgo mimuliit	, Line Laini Tiv	, בוווס בוווס בוווס	, _1.0 11 10 02
l		228*68*38.8n		7. Z 171 (20 C)						
	DIMENSION			IET						
	PACKING		s/14.8Kg/0.8Cl		it roted access	at and OF°C -f	ambiant tarre	oroturo		
NOTE	i. Ali parameters NOT speciali	y mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.								

- 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 driver 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.
- 8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.
- 9. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (to) point (or TMP, per DLC), is about 80 ℃ or less.
- 10. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com.
- 11. 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).
- 12. 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

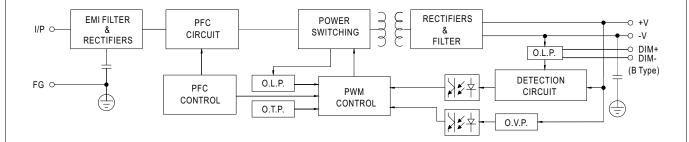




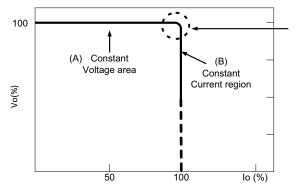
HLG-150H series

■ BLOCK DIAGRAM

Fosc: 100KHz



■ DRIVING METHODS OF LED MODULE



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.





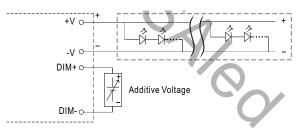
HLG-150H series

■ DIMMING OPERATION



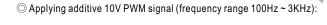
imes 3 in 1 dimming function (for B/AB-Type)

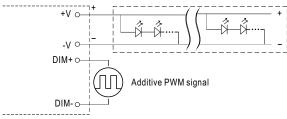
- $\cdot \ \, \text{Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:}$
 - $1 \sim 10 \text{VDC}$, or 10 V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100µA (typ.)
- O Applying additive 1 ~ 10VDC



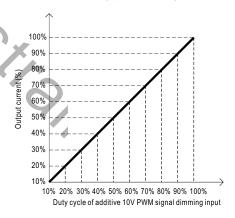
"DO NOT connect "DIM- to -V"

100% 90% 80% 70% 60% 40% 30% 40% 30% 40% Dimming input: Additive voltage

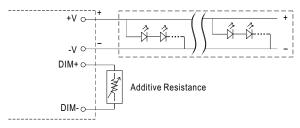




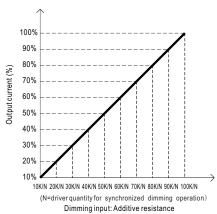
"DO NOT connect "DIM- to -V"



O Applying additive resistance:



"DO NOT connect "DIM- to -V"

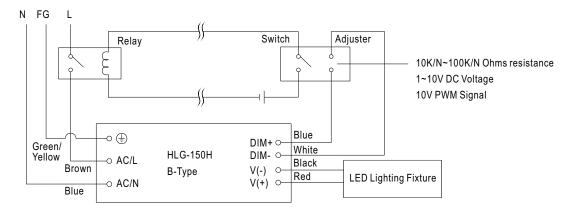






HLG-150H series

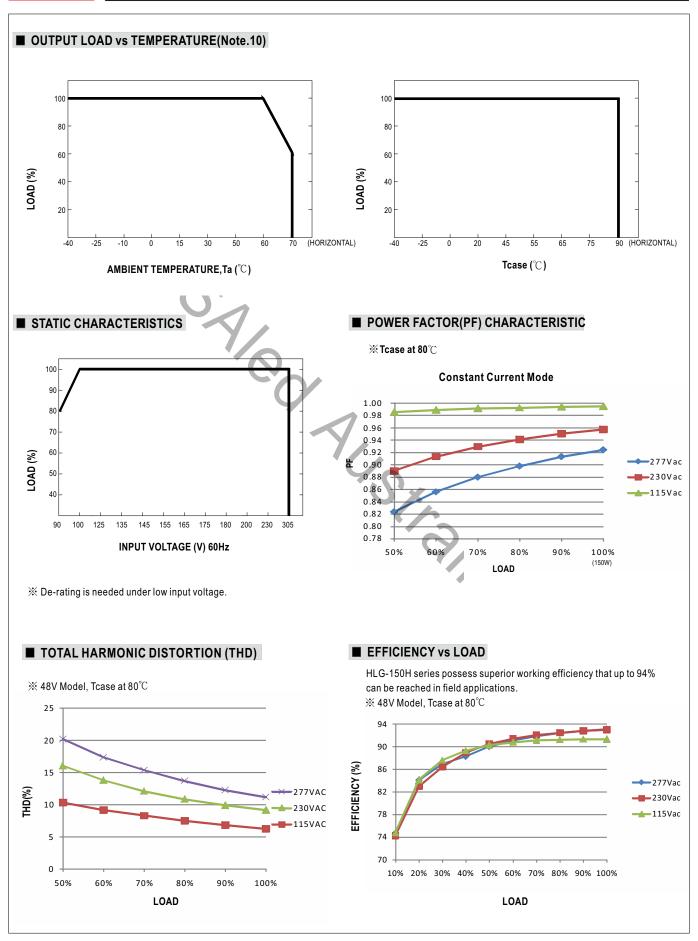
Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



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



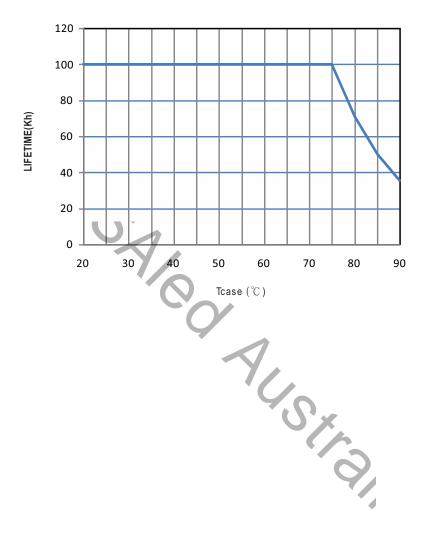






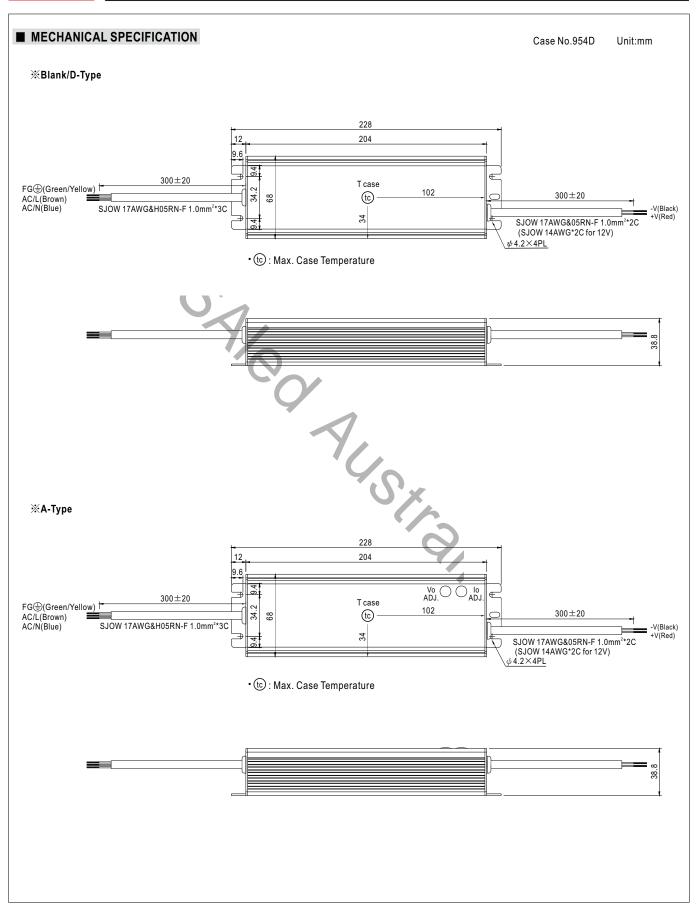






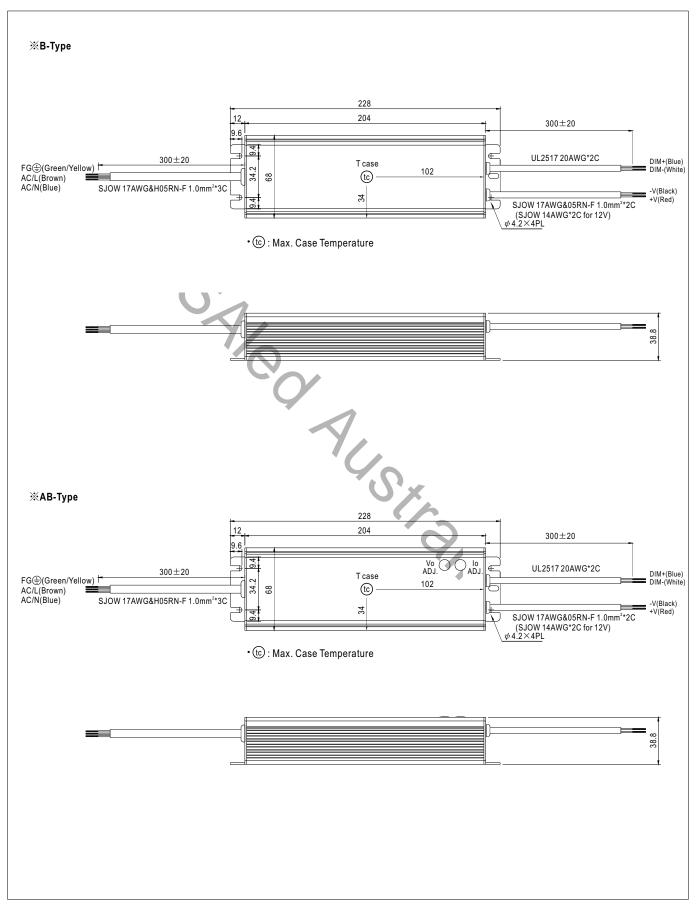














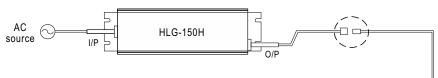


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■ WATERPROOF CONNECTION

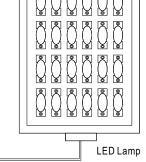
Waterproof connector

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

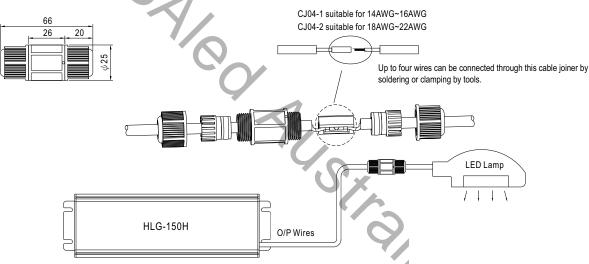


Size	Pin Configuration (Female)			
M12	000	000		
IVITZ	4-PIN	5-PIN		
	5A/PIN	5A/PIN		
Order No.	M12-04	M12-05		
Suitable Current	10A max.	10A max.		

Size	Pin Configuration (Female)		
M15	(o)		
IVITO	2-PIN		
	12A/PIN		
Order No.	M15-02		
Suitable Current	12A max.		

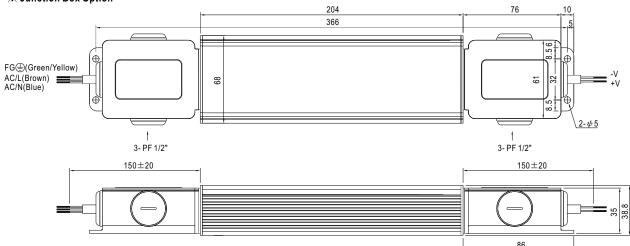


※ Cable Joiner



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

※ Junction Box Option



O Junction box option is available for A/Blank - Type. Please contact MEAW WELL for details.

■ INSTALLATION MANUAL

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