

Наличие и актуальные цены на

# HLG-120H-48B

https://www.mean-

well.ru/store/HLG-120H-48B/

























- · Constant Voltage + Constant Current mode output
- Metal housing with class | design
- · Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
   3 in 1 dimming; Timer 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.

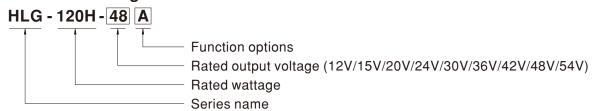
### ■ GTIN CODE

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

# Description

HLG-120H series is a 120W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-120H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 93.5%, with the fanless design, the entire series is able to operate for -40°C ~ +80°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-120H 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



### **SPECIFICATION**

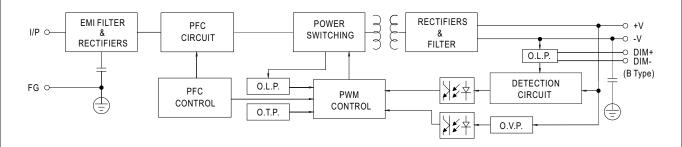
MODEL		HLG-120H-12	HLG-120H-15	HLG-120H-20	HLG-120H-24	HLG-120H-30	HLG-120H-36	HLG-120H-42	HLG-120H-48	HLG-120H-54
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.4	6~12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V
	RATED CURRENT	10A	8A	6A	5A	4A	3.4A	2.9A	2.5A	2.3A
	RATED POWER	120W	120W	120W	120W	120W	122.4W	121.8W	120W	124.2W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
		Adjustable for A/AB-Type only (via built-in potentiometer)								
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
DUTPUT	CURRENT AR L RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)								
	CURRENT ADJ. RANGE	5 ~ 10A	4 ~ 8A	3 ~ 6A	2.5 ~ 5A	2~4A	1.7 ~ 3.4A	1.4 ~ 2.9A	1.2 ~ 2.5A	1.1 ~ 2.3A
	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%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.6	1200ms,50m	s/115VAC 5	00ms,50ms/2	30VAC		1	1	1	
	HOLD UP TIME (Typ.)	12ms / 115VA	C, 230VAC							
		90 ~ 305VAC 127 ~ 431VDC								
	VOLTAGE RANGE Note.5									
	FREQUENCY RANGE	47 ~ 63Hz								
		PF≧0.98/115	VAC, PF≧0.9	5/230VAC, PF	≥0.93/277VA	C @ full load				
	POWER FACTOR (Typ.)	PF≧0.98/115VAC, PF≧0.95/230VAC, PF≧0.93/277VAC @ full load  (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)								
		THD< 20% (@ load≥50% / 115VAC,230VAC; @ load≥75% / 277VAC)								
	TOTAL HARMONIC DISTORTION	(Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)								
NPUT	EFFICIENCY (Typ.)	92%	92%	93%	93%	93%	93%	93%	93.5%	93.5%
	AC CURRENT (Typ.)	1.4A / 115VA			.55A / 277VAC		100,0			
	INRUSH CURRENT (Typ.)	COLD START	60A(twidth=375	μs measured a	it 50% Ipeak) at	230VAC; Per N	EMA 410			
	MAX. No. of PSUs on 16A	COLD START 60A(twidth=375\(\mu\)s measured at 50% Ipeak) at 230VAC; Per NEMA 410								
	CIRCUIT BREAKER	5 units (circuit breaker of type B) / 9 units (circuit breaker of type C) at 230VAC								
	LEAKAGE CURRENT	<0.75mA/277VAC								
		95 ~ 108%								
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed								
PROTECTION		14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V
	OVER VOLTAGE	Shut down o/p	voltage with a	auto-recovery	or re-power on	to recovery				
	OVER TEMPERATURE					erature goes d	own			
	WORKING TEMP.	Tcase= -40 ~	+80°C (Pleas	e refer to "OU	TPUT LOAD v	s TEMPERATI	JRE" section)			
	MAX. CASE TEMP.	Tcase= +80°C					,			
	WORKING HUMIDITY	20 ~ 95% RH non-condensing								
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)								
	VIBRATION			cle period for	72min_each al	ong X Y 7 axe	·S			
		10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes  UL8750(type"HL"), CSA C22.2 No. 250.0-08, BS EN/EN 61347-1, BS EN/EN 61347-2-13,AS/NZS 61347-1(e AS/NZS 61347-2-13(except for AB-type) independent;GB19510.1,GB19510.14,IP65 or IP67, J61347-1, J61						( · · · · · · · ·	31,	
	SAFETY STANDARDS Note.8	D-type),BIS IS15885( for 12B,24B,36A,54A only), EAC TP TC 004,KC61347-1,KC61347-2-13(except for D-type) approved								
	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	/P-FG:1.5KV	AC .				
	ISOLATION RESISTANCE									
	EMC EMISSION Note.8	//P-O/P,  /P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   Compliance to BS EN/EN55015, BS EN/EN55032 Class B, BS EN/EN61000-3-2 Class C (@ load≥50%); BS EN/EN61000-3-3,   GB/T 17743, GB17625.1, EAC TP TC 020, KSC 9815(except for D-type)								
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, BS EN/EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV), EAC TP TC 020, KSC 9547 (except for D-type)								
OTHERS	MTBF			R-332 (Bellco		· ·	DBK-217F (25	°C)		
	DIMENSION	220*68*38.8n		71. 002 (Delico	10/, 10/.1111111	, IVIIL-II	DDI( 2111 (20	<i>(</i> )		
	PACKING		s/14.4Kg/0.8C	UFT						
	I AURING	U .		at 230VAC inp						

### NOTE

- 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. (as available on https://www.meanwell.com//Upload/PDF/EMI statement en.pdf)
- 8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently
- 9. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 75°C 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
- 13. 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

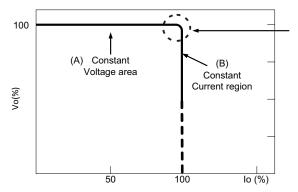
### ■ BLOCK DIAGRAM

Fosc: 100KHz



### ■ DRIVING METHODS OF LED MODULE

\*\* 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.

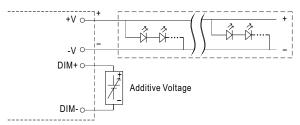


### ■ DIMMING OPERATION



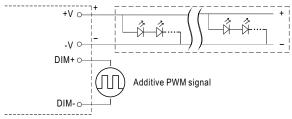
### ※ 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \, \text{Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:}$ 
  - 1 ~ 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 1 ~ 10VDC



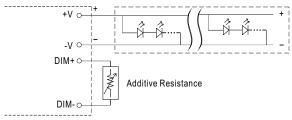
"DO NOT connect "DIM- to -V"

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

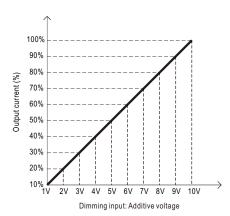


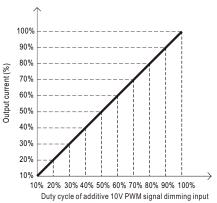
"DO NOT connect "DIM- to -V"

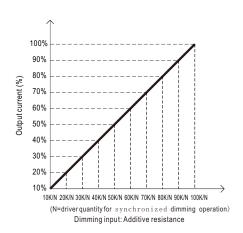
Applying additive resistance:



"DO NOT connect "DIM- to -V"

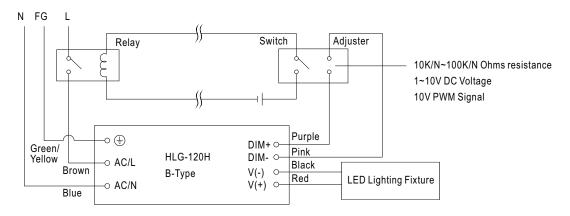








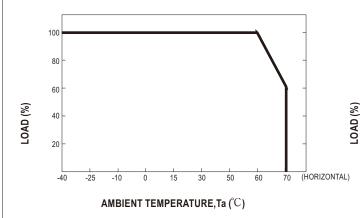
Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.

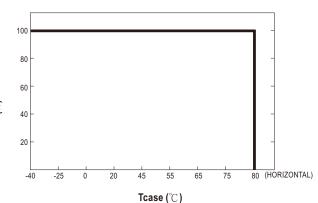


Using a switch and relay can turn ON/OFF the lighting fixture.

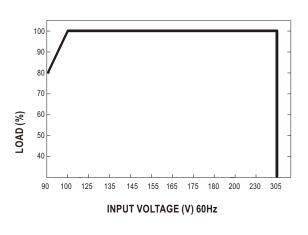


# ■ OUTPUT LOAD vs TEMPERATURE(Note.10)





### ■ STATIC CHARACTERISTICS



### ■ POWER FACTOR(PF) CHARACTERISTIC





\* De-rating is needed under low input voltage.

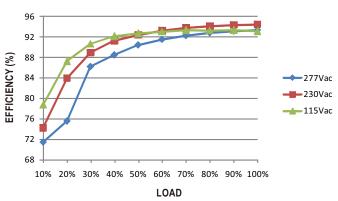
### ■ TOTAL HARMONIC DISTORTION (THD)

# \*\* 48V Model, Tcase at 70°C 25 20 15 115VAC 230VAC 2777VAC 50% 60% 70% 80% 90% 100% LOAD

### **■** EFFICIENCY vs LOAD

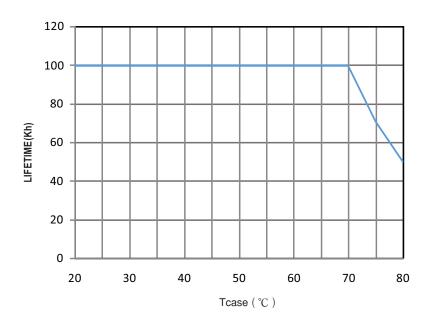
HLG-120H series possess superior working efficiency that up to 93.5% can be reached in field applications.

¾ 48V Model, Tcase at 70°C

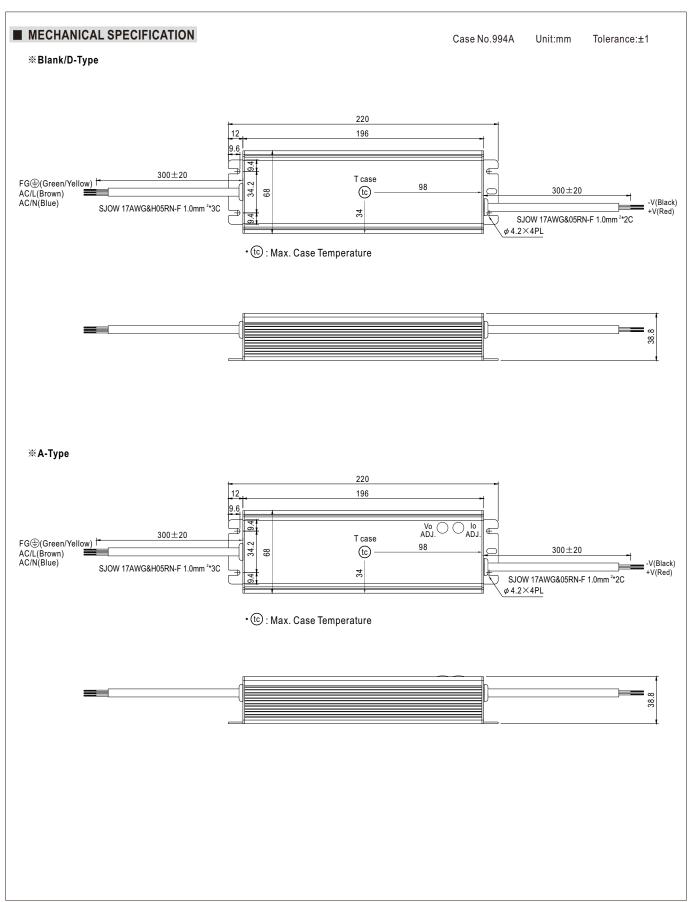




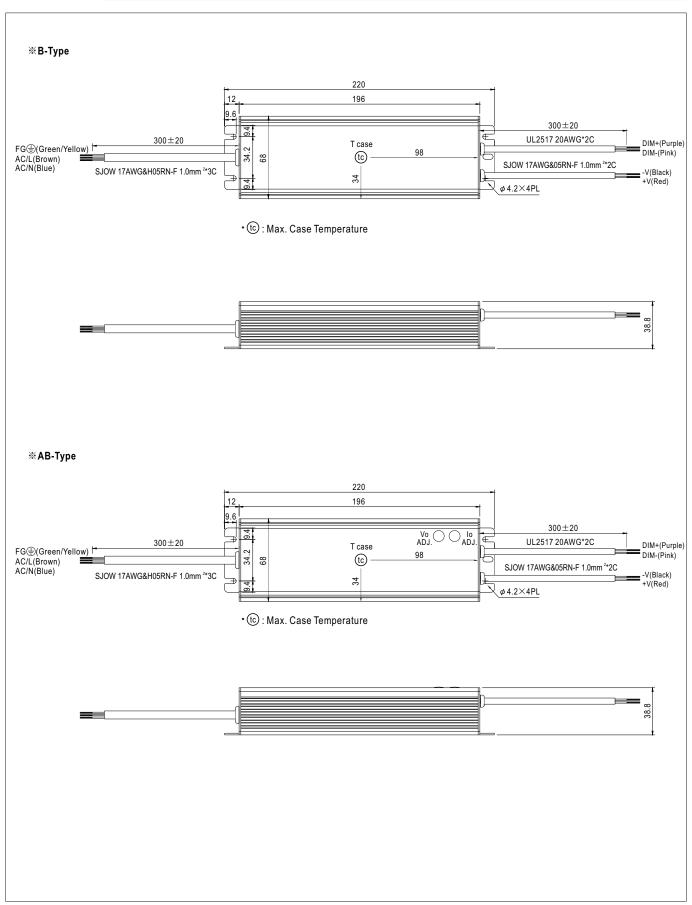
# ■ LIFE TIME









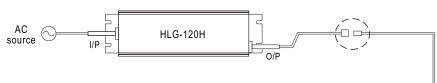




### ■ WATERPROOF CONNECTION

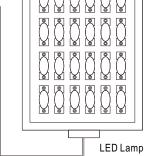
### **\* Waterproof connector**

Water proof connector can be assembled on the output cable of HLG-120H to operate in dry/wet/damp or outdoor environment.

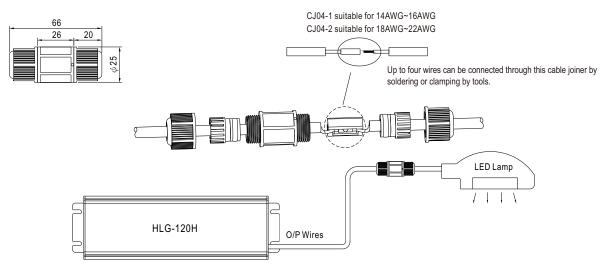


Size	Pin Configuration (Female)			
M12	000	000		
IVIIZ	4-PIN	5-PIN		
	5A/PIN	5A/PIN		
Order No.	M12-04	M12-05		
Suitable Current	10A max.	10A max.		

Size	Pin Configuration (Female)		
M15	00		
IVITO	2-PIN		
	12A/PIN		
Order No.	M15-02		
Suitable Current	12A max.		

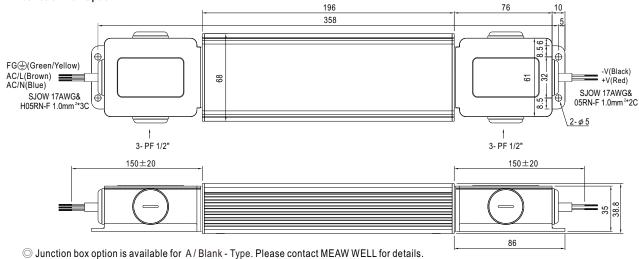


### **X** Cable Joiner



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

### **\* Junction Box Option**



### ■ INSTALLATION MANUAL

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