



320W Constant Voltage + Constant Current LED Driver

HLG-320H series



■ Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- Built-in active PFC function
- 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

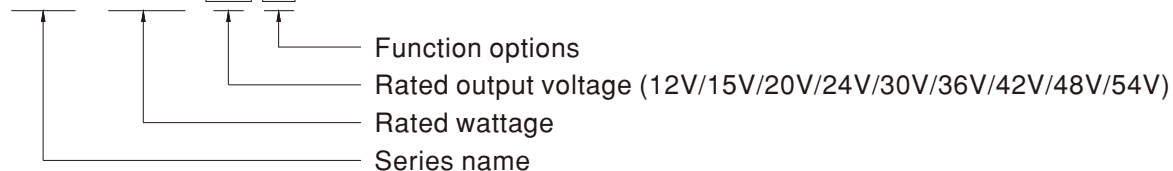
- LED street lighting
- LED high-bay lighting
- Parking space lighting
- LED fishing lamp
- LED greenhouse lighting
- Type “HL” for use in Class I , Division 2 hazardous (Classified) location.

■ Description

HLG-320H series is a 320W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-320H operates from 90 ~ 305VAC 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 ~ +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-320H is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

■ Model Encoding

HLG - 320H - 15 A



Type	IP Level	Function	Note
Blank	IP67	Io and Vo fixed	In Stock
A	IP65	Io and Vo adjustable through built-in potentiometer	In Stock
B	IP67	3 in 1 dimming function (1~10VDC, 10V PWM signal and resistance)	In Stock
AB	IP65	Io adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
C	-----	Terminal block for I/O connection. Output voltage and constant current level can be adjusted through internal potentiometer.	By request
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request

SPECIFICATION

MODEL		HLG-320H-12	HLG-320H-15	HLG-320H-20	HLG-320H-24	HLG-320H-30	HLG-320H-36	HLG-320H-42	HLG-320H-48	HLG-320H-54	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION <small>Note.4</small>	6 ~ 12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	22A	19A	15A	13.34A	10.7A	8.9A	7.65A	6.7A	5.95A	
	RATED POWER	264W	285W	300W	320.16W	321W	320.4W	321.3W	321.6W	321.3W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p	
	VOLTAGE ADJ. RANGE	Adjustable for A/C-Type only (via built-in potentiometer) 10.8 ~ 13.5V 13.5 ~ 17V 17 ~ 22V 21 ~ 26V 26 ~ 32V 32 ~ 39V 38 ~ 45V 43 ~ 52V 49 ~ 58V									
	CURRENT ADJ. RANGE	Adjustable for A/AB/C-Type only (via built-in potentiometer) 11 ~ 22A 9.5 ~ 19A 7.5 ~ 15A 6.67 ~ 13.34A 5.35 ~ 10.7A 4.45 ~ 8.9A 3.8 ~ 7.65A 3.35 ~ 6.7A 2.97 ~ 5.95A									
	VOLTAGE TOLERANCE <small>Note.3</small>	± 3.0%	± 2.0%	± 1.5%	± 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%	
SETUP, RISE TIME <small>Note.6</small>	2500ms,80ms/115VAC 500ms,80ms/230VAC										
HOLD UP TIME (Typ.)	15ms / 115VAC, 230VAC										
INPUT	VOLTAGE RANGE <small>Note.5</small>	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 ≥ 0.94/277VAC @ full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)									
	TOTAL HARMONIC DISTORTION	THD < 20% (@ load ≥ 50% / 115VAC, 230VAC; @ load ≥ 75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)									
	EFFICIENCY (Typ.) (230Vac)	91%	92.5%	93.5%	94%	94%	94.5%	95%	95%	95%	
	EFFICIENCY (Typ.) (277Vac)	91.5%	93%	94%	94.5%	94.5%	95%	95%	95%	95%	
	AC CURRENT (Typ.)	3.5A / 115VAC 1.65A / 230VAC 1.45A / 277VAC									
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=1010μs measured at 50% Ipeak) at 230VAC; Per NEMA 410									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	1 unit (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC									
LEAKAGE CURRENT	<0.75mA / 277VAC										
PROTECTION	OVER CURRENT <small>Note.4</small>	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed									
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	14 ~ 17V	17.5 ~ 21V	22.5 ~ 27V	27 ~ 33V	33 ~ 37V	40 ~ 46V	46.5 ~ 53V	53.5 ~ 60V	59 ~ 65V	
	OVER TEMPERATURE	Shut down and latch off o/p voltage, re-power on to recover									
ENVIRONMENT	WORKING TEMP.	Tcase= -40 ~ +90℃ (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)									
	MAX. CASE TEMP.	Tcase= +90℃									
	WORKING HUMIDITY	20 ~ 95% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	± 0.03%/℃ (0 ~ 50℃)									
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes									
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.0-08; EN/AS/NZS 61347-1, EN/AS/NZS 61347-2-13, EN62384 independent; GB19510.1,GB19510.14; IP65 or IP67 (except for HLG-320H C-type); J61347-1, J61347-2-13 (except for B,AB,C and D-type), EAC TP TC 004; KC61347-1, KC61347-2-13(except for AB,C-type) approved									
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH									
	EMC EMISSION	Compliance to EN55015, EN55032 (CISPR32) Class B, EN61000-3-2 Class C (@ load ≥ 50%) ; EN61000-3-3,EN61000-3-3, GB17743 and GB17625.1,EAC TP TC 020									
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV), EAC TP TC 020									
OTHERS	MTBF	157.1K hrs min. MIL-HDBK-217F (25℃)									
	DIMENSION	252*90*43.8mm (L*W*H)									
	PACKING	1.88Kg; 8pcs/16Kg/0.92CUFT									
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ 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 (Tc) point (or TMP, per DLC), is about 75℃ 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℃/1000m with fanless models and of 5℃/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										