## 150W Constant Voltage+Constant Current Mode LED Driver XLG-150-H-ADI





#### Features

- Wide input range 100~305V AC( Class I)
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6KV/4KV
- Protection functions: OVP/SCP/OCP/OTP
- Life time >50,000 hrs. and 5 years warranty

## Applications

- · Skyscraper lighting
- · Street lighting
- · Floodlight Lighting
- Stage lighting
- · Fishing lighting
- · Horticulture lighting
- · Bay lighting
- DMX power supply
- Type HL for use in class I, Division 2

**MEAN WELL** 





#### 150W Constant Voltage + Constant Current LED Driver

#### **SPECIFICATION**

ORDER NAME		XLG-150-H-ADI			
MODEL		XLG-150-H-A			
	DC VOLTAGE	48V			
ОИТРИТ	CONSTANT CURRENT REGION Note.2	33.6~ 48V			
	RATED CURRENT	3.13A			
	RATED POWER	150.2W			
	RIPPLE & NOISE (max.) Note.3	300mVp-p			
	CURRENT ADJ. RANGE	1.57~ 3.13A			
	VOLTAGE TOLERANCE Note.4				
	LINE REGULATION	±0.5%			
	LOAD REGULATION	±1%			
	SETUP, RISE TIME Note.6	500ms, 100ms/230VAC, 1200ms, 100ms/115VAC			
	HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC			
		100 ~ 305VAC 142 ~ 431VDC			
INPUT	VOLTAGE RANGE Note.5	(Please refer to "STATIC CHARACTERISTIC" section)			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR	$PF \! \ge \! 0.97/115 VAC, PF \! \ge \! 0.95/230 VAC, PF \! \ge \! 0.92/277 VAC \\                                   $			
	TOTAL HARMONIC DISTORTION	THD<10%(@load≥50%/115VC,230VAC; @load≥75%/277VAC)			
	EFFICIENCY (Typ.)	91.5%			
	AC CURRENT	1.8A / 115VAC 1.0A / 230VAC 0.8A / 277VAC			
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=500µs measured at 50% Ipeak) at 230VAC; Per NEMA 410			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC			
	LEAKAGE CURRENT	<0.75mA / 277VAC			
	LEARAGE CORRENT	95 ~ 108%			
PROTECTION	OVER CURRENT	Hiccup mode or constant current limiting, recovers automatically after fault condition is removed			
	SHORT CIRCUIT	Hiccup mode or constant current limiting, recovers automatically after fault condition is removed			
	CHOICI CIRCOH	54 ~ 66V	ing, 1000 voto automatically after fault container to	Tomorou	
	OVER VOLTAGE	Shut down output voltage, re-power o	n to recover		
	OVER TEMPERATURE	Shut down output voltage, re-power on to recover			
	WORKING TEMP.	Tcase=-40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)			
	MAX. CASE TEMP.	Tcase=+90°C			
	WORKING HUMIDITY	20 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +90°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.06%/°C (0~60°C)			
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
	VIDICATION				
	SAFETY STANDARDS Note.7	UL8750(type"HL"), UL879,CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB1 EAC TP TC 004; J61347-1(H29), J61347-2-13(H29), KC61347-1, KC61347-2-13; IP67 approved			
	WITHSTAND VOLTACE	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°C / 70% RH			
	ISOLATION RESISTANCE				
	EMC EMISSION	Parameter	Standard CNEEDAS OF TAZZAO	Test Level/Note	
		Conducted	EN55015(CISPR15) ,GB/T17743		
		Radiated	EN55015(CISPR15) ,GB/T17743		
		Harmonic Current	EN61000-3-2 ,GB/T17625.1	Class C @load≥50%	
		Voltage Flicker	EN61000-3-3		
AFETY &	EMC IMMUNITY	EN61547			
IVIC		Parameter	Standard	Test Level/Note	
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN61000-4-3	Level 2	
		EFT/Burst	EN61000-4-4	Level 3	
		Surge	EN61000-4-5	4KV/Line-Line 6KV/Line-Earth	
		Conducted	EN61000-4-6	Level 2	
		Magnetic Field	EN61000-4-8	Level 4	
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	
	MTBF	712.17K hrs min. Telcordia SR-332	2 (Bellcore); 213.3Khrs min. MIL-HDBK-2	217F (25°C)	
OTHERS	MTBF DIMENSION	712.17K hrs min. Telcordia SR-332 180*63*35.5mm (L*W*H) 0.8Kg;16pcs / 13.4Kg /0.67CUFT	2 (Bellcore); 213.3Khrs min. MIL-HDBK-2	217F (25°C)	

#### NOTE

- 2. Please refer to "PRIVING METHODS OF LED MODULE".

  3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

  4. Tolerance: includes set up tolerance, line regulation and load regulation.

- 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. 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).

- 9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com

  10. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 75°C or less.

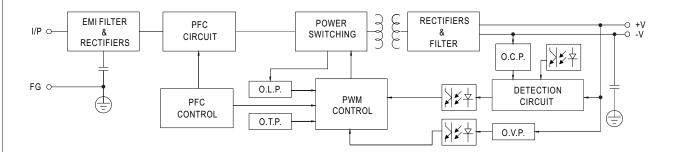
  11. Products sourced from the Americas regions may not have the CCC/PSE/BIS/KC logo. Please contact your MEAN WELL sales for more information.
- For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED\_EN.pdf
- 13. To fulfill requirements of the latest ErP regulation for lighting fixture, this LED driver can only be used behind a switch without permanently connected to the mains.



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#### ■ BLOCK DIAGRAM

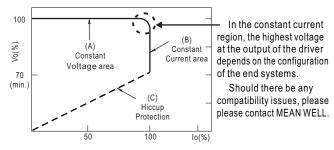
PFC fosc: 50~120KHz PWM fosc: 60~130KHz



#### **■** DRIVING METHODS OF LED MODULE

#### ※ I-V Operating Area

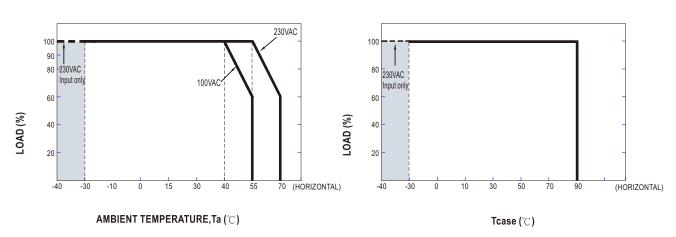
This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.



Typical output current normalized by rated current (%)

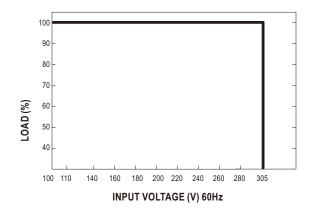


#### ■ OUTPUT LOAD vs TEMPERATURE



The maximum workable Ta is 55  $^{\circ}\mathrm{C}$  (Typ. 230VAC) or 40  $^{\circ}\mathrm{C}$  (Typ.100VAC) Below 110VAC@ -30  $^{\circ}\mathrm{C}$  may retry to 2nd setup

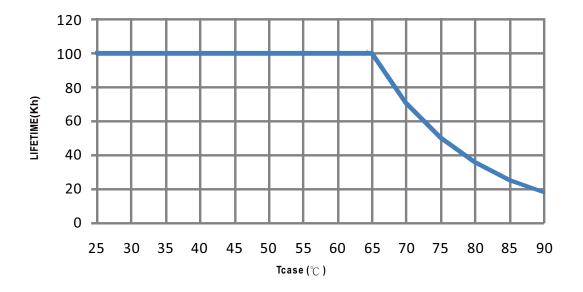
#### ■ STATIC CHARACTERISTIC



MEAN WELL 2020/6/9 ISSUE



### ■ LIFE TIME



MEAN WELL 2020/6/9 ISSUE



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