





















### Features

- Wide input range 100~305V AC( Class I)
- Full power output at 70~100% Constant power mode operation
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6KV/4KV
- DALI-2 Dimming with minimum level 8%
- 12V/250mA Auxiliary power available(optional)
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- Protection functions: SCP/OTP
- Life time >50,000 hrs. and 5 years warranty

### Applications

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

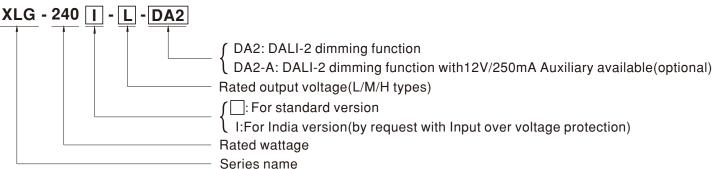
Description

#### GTIN CODE

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

XLG-240-DA2 series is a 240W LED AC/DC driver featuring the constant power mode with DALI-2 dimming function. XLG-240-DA2 operates from 100~305VAC and offers models with different rated current ranging between 700mA and 6660mA. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40 $^\circ$ C ~+90 $^\circ$ C case temperature under free air convection. The design of metal housing and IP67 ingress protection level allows this series to fit both indoor and outdoor applications. Moreover the innovative environment-adaptive capability allows this series to reliably light on the LEDs for all kinds of application environments in almost any spots that may install LED luminaires in the world. XLG-240-DA2 series comply with the latest version of IEC61347/GB19510.1 and UL8750 international safety regulations. The output and dimming circuit are also completely in accordance with the new regulations with isolation to ensure the safety of both user and luminaire system during installation.

### Model Encoding



Type	Function	Note
DA2	DALI-2 control technology with Io adjustable via built-in potentiometer	In Stock
DA2-A	DALI-2 control technology with Io adjustable via built-in potentiometer and auxiliary power 12V/250mA	by request

## 240W Constant Power Mode with DALI-2 LED Driver

#### **SPECIFICATION**

MODEL	ICATION	XLG-240 -L-	XLG-240 -M-	XLG-240 -H-		
WIODEL	DATED CURRENT/Defecte)	700mA	1400mA	4900mA		
	RATED CURRENT(Default) RATED POWER	239.4W	239.4W	239.6W		
	CONSTANT CURRENT REGION Note.2		90 ~ 171V	27 ~ 56V		
ОИТРИТ	FULL POWER CURRENT RANGE	700~1050mA	1400~2100mA	4280~6660mA		
	OPEN CIRCUIT VOLTAGE (max.)	380V	197V	65V		
	Of ER ORGOTT FOETHOE (Max.)	(Via the built-in potentiometer)	1017	001		
	CURRENT ADJ. RANGE	350~1050mA	700~2100mA	2400~6660mA		
	CURRENT RIPPLE		700 2100IIIA	2400 0000IIIA		
	CURRENT TOLERANCE	5%(@ full load) ±5%				
	AUXILIARY DC OUTPUT					
	SET UP TIME	12V@250mA tolerance ±10%, ripple 200mVp-p (only for DA2-A-type) 500ms/230VAC, 1200ms/115VAC				
	OLI OI TIME	100 ~ 305VAC 142VDC ~ 431VDC				
	VOLTAGE RANGE Note.4	(Please refer to "STATIC CHARACTERISTIC" ang " DRIVING METHODS OF LED MODULE" section)				
	FREQUENCY RANGE	47 ~ 63Hz				
		$PF \ge 0.97 / 115VAC$ , $PF \ge 0.95 / 230VAC$ , $PF \ge 0.92 / 277VAC$ at full load				
	POWER FACTOR (Typ.)	(Please refer to "Power Factor Characteristic" section)				
		THD<10% (@ load≥50% at 115VAC/230VAC,@load≥75% at 277VAC)				
	TOTAL HARMONIC DISTORTION	Please refer to "TOTAL HARMONIC DISTORTION (THD)" section				
	EFFICIENCY (Typ.) Note.14	94%	93.5%	93%		
PUT	AC CURRENT (Typ.)	2.7A / 115VAC 1.3A / 230VAC	1.1A/277VAC			
	INRUSH CURRENT(Typ.)	COLD START 85A(twidth=500us m	easured at 50% Ineak) at 230VAC: Per NEMA 410			
	MAX. NO. of PSUs on 16A	COLD START 85A(twidth=500µs measured at 50% lpeak) at 230VAC; Per NEMA 410				
	CIRCUIT BREAKER	2 unit(circuit breaker of type B) / 4 units(circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT	40.7FA 10.77\A0				
		<0.75mA / 277VAC				
	STANDBY POWER CONSUMPTION	Standby power consumption <0.5W (Dimming OFF, Only for standard version DA2-type)				
	SHORT CIRCUIT	Hiccup mode or Constant current limiting, recovers automatically after fault condition is removed				
	SHOKT CIRCUIT	320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is removed.				
DTECTION	INPUT OVER VOLTAGE Note.7	covers automatically after laute condition is remi				
	OVED TEMPEDATURE	Can survive input voltage stress of 440Vac for 48 hours  Stage 1: Derating to 75% loading; stage 2: Derating to 50% loading, recovers automatically after fault condition is removed				
	OVER TEMPERATURE	Tcase=-40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)				
ENVIRONMENT	WORKING TEMP. MAX. CASE TEMP.	Tcase=+90°C	O OUTFUT EOAD VS TEINIFERATURE Section)			
		20 ~ 95% RH non-condensing				
	WORKING HUMIDITY STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH non-condensing				
	TEMP. COEFFICIENT	±0.06%/°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. 250.13-12; ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 (EL) appendix J suitable for emergency installations(DC Input: 176-280Vdc) independent, GB19510.1, GB19510.14; EAC TP TC 004; IS 15885(Part2/Sec13)(for XLG-240I-DA2 only); IP67 approv				
	SAFETY STANDARDS					
	DALI STANDARDS	Comply with IEC62386-101,102,207,251, Device type 6(DT6)				
		• • • • • • • • • • • • • • • • • • • •				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KV				
SAFETY & EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M O				
	EMC EMISSION	Parameter	Standard	Test Level/Note		
		Conducted	BS EN/EN55015(CISPR15) ,GB/T17743			
		Radiated	BS EN/EN55015(CISPR15) ,GB/T17743			
		Harmonic Current	BS EN/EN61000-3-2 ,GB/T17625.1	Class C @load≥50%		
		Voltage Flicker	BS EN/EN61000-3-3			
		BS EN/EN61547				
		Parameter	Standard	Test Level/Note		
		ESD	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
		Radiated	BS EN/EN61000-4-3	Level 2		
	EMC IMMUNITY	EFT/Burst	BS EN/EN61000-4-4	Level 3		
	EMCIMMUNITY	Surge	BS EN/EN61000-4-5	4KV/Line-Line 6KV/Line-Earth		
		Conducted	BS EN/EN61000-4-6	Level 2		
		Magnetic Field	BS EN/EN61000-4-8	Level 4		
		Voltage Dips and Interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods,		
		voltage Dips and interruptions	B3 EN/EN01000-4-11	>95% interruptions 250 periods		
	MTBF	1988.7K hrs min. Telcordia S	GR-332 (Bellcore); 170.5K hrs min. MIL-	HDBK-217F (25°C)		
	WIIDF	0.40400405.5				
HERS		219*63*35.5mm (L*W*H)	1Kg;16pcs/16Kg/0.80CUFT			
HERS	DIMENSION	219*63*35.5mm (L*W*H) 1Kq;16pcs/16Kq/0.80CUFT				
	DIMENSION PACKING	1Kg;16pcs/16Kg/0.80CUFT	t, rated current and 25°C of ambient temperature.			
THERS	DIMENSION PACKING  1. All parameters NOT specially me 2. Please refer to "DRIVING METH	1Kg;16pcs/16Kg/0.80CUFT entioned are measured at 230VAC inpu ODS OF LED MODULE".	•			
	DIMENSION PACKING  1. All parameters NOT specially me 2. Please refer to "DRIVING METH 3. Tolerance : includes set up tolere	1Kg;16pcs/16Kg/0.80CUFT entioned are measured at 230VAC inpu ODS OF LED MODULE". ance, line regulation and load regulatior	i.			
	DIMENSION PACKING  1. All parameters NOT specially me 2. Please refer to "DRIVING METH 3. Tolerance: includes set up tolere 4. De-rating may be needed under 5. Length of set up time is measure	1Kg;16pcs/16Kg/0.80CUFT entioned are measured at 230VAC inpu ODS OF LED MODULE". Including the regulation and load regulation low input voltages. Please refer to "ST/rd at first cold start. Turning ON/OFF th	•	when the temperature		
	DIMENSION PACKING  1. All parameters NOT specially me 2. Please refer to "DRIVING METH 3. Tolerance: includes set up tolera 4. De-rating may be needed under 5. Length of set up time is measure inside driver is very high, it will le	1Kg;16pcs/16Kg/0.80CUFT introduced are measured at 230VAC input ODS OF LED MODULE". ance, line regulation and load regulation low input voltages. Please refer to "ST/d at first cold start. Turning ON/OFF th ad to a longer set up time.	The ATIC CHARACTERISTIC" sections for details.  The driver may lead to increase of the set up time. Especially the set up time.	•		
	DIMENSION PACKING  1. All parameters NOT specially me 2. Please refer to "DRIVING METH 3. Tolerance : includes set up tolera 4. De-rating may be needed under 5. Length of set up time is measure inside driver is very high, it will le 6. Based on IEC 62386-101/102 D/	1Kg;16pcs/16Kg/0.80CUFT introduced are measured at 230VAC input ODS OF LED MODULE". ance, line regulation and load regulation low input voltages. Please refer to "ST/d at first cold start. Turning ON/OFF th ad to a longer set up time.	The ATIC CHARACTERISTIC" sections for details.  The driver may lead to increase of the set up time. Especially gulations, the set up time needs to test with a DALI controller.	•		

- 7. Input over voltage only for XLG-240 I series,and I series without UL/CSA certificate.
- 8. 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.
- complete installation, the lineal equipment manufacturers must re-quality zinc bineaute on the complete installation, again.

  9. The ambient temperature derating of 3.5°C/1000m with families models and 6 5°C/1000m with fam models for operating altitude higher than 2000m(6500ft).

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

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

  12. Products sourced from the Americas regions may not have the CCC/PSE/BIS/KC logo. Please contact your MEAN WELL sales for more information.

  13. 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
- https://www.meanwell.com/Upload/PDF/LED\_EN.pdf

  14. The efficiency will drop 1% based on auxiliary power version with full load 3W condition.

  15. H type: RCM is on a voluntary basis. Non IC classification Independent LED control gear is not suitable for residential installations;

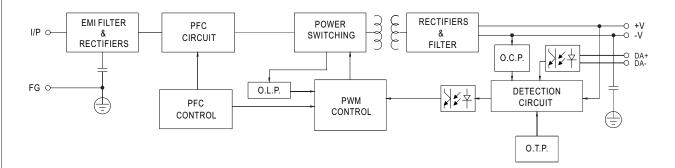
  ML type: RCM is on a voluntary basis and meets relevant IEC or AS/NZS standards complying with AS/NZS 4417.1

  16. 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. ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



#### ■ BLOCK DIAGRAM

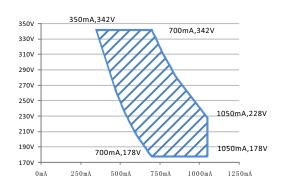
PFC fosc: 50~120KHz PWM fosc: 60~130KHz



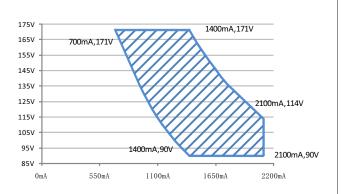
#### ■ DRIVING METHODS OF LED MODULE

**% I-V Operating Area** 

#### XLG-240-L-DA2



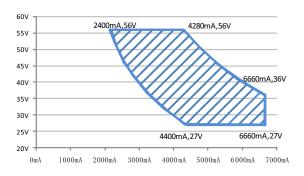
#### XLG-240-M-DA2



Recommend Performance Region

Recommend Performance Region

#### ⊚ XLG-240-H-DA2



Recommend Performance Region



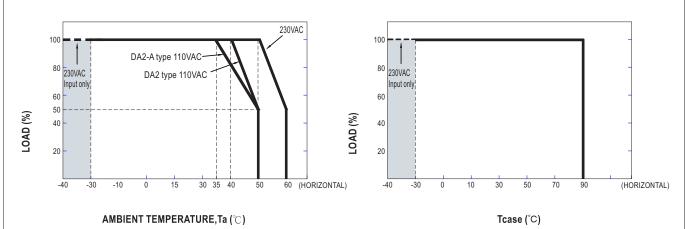
#### **■** DIMMING OPERATION



#### **\* DALI Interface**

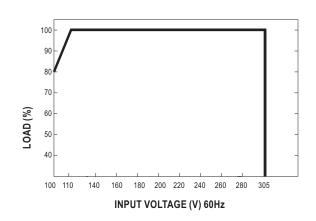
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

#### ■ OUTPUT LOAD vs TEMPERATURE



Note:1. The output current must be derated at ultra-high ambient temperature. 2.Below 120VAC@-30°C may has restart situation within 5s after power-on.

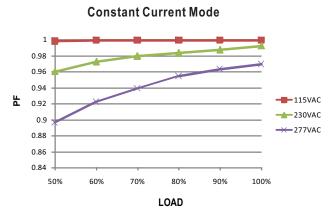
#### ■ STATIC CHARACTERISTIC



### **■ POWER FACTOR (PF) CHARACTERISTIC**

※ Tcase at 75°

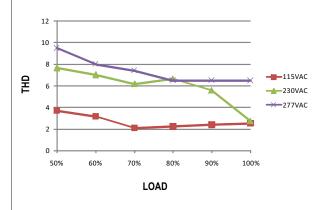
C





#### ■ TOTAL HARMONIC DISTORTION (THD)

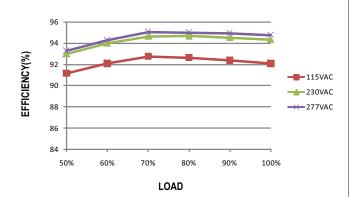
% XLG-240-L-DA2 Model, Tcase at 75 $^{\circ}$ C



#### **■** EFFICIENCY vs LOAD

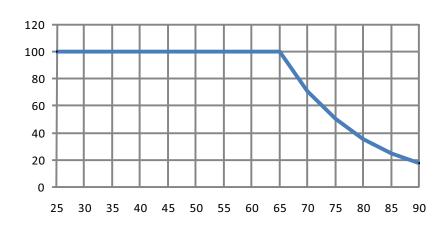
XLG-240-DA2 series possess superior working efficiency that up to 93% can be reached in field applications.

XLG-240-L-DA2 Model, Tcase at  $75^{\circ}\!\!\!\subset$ 

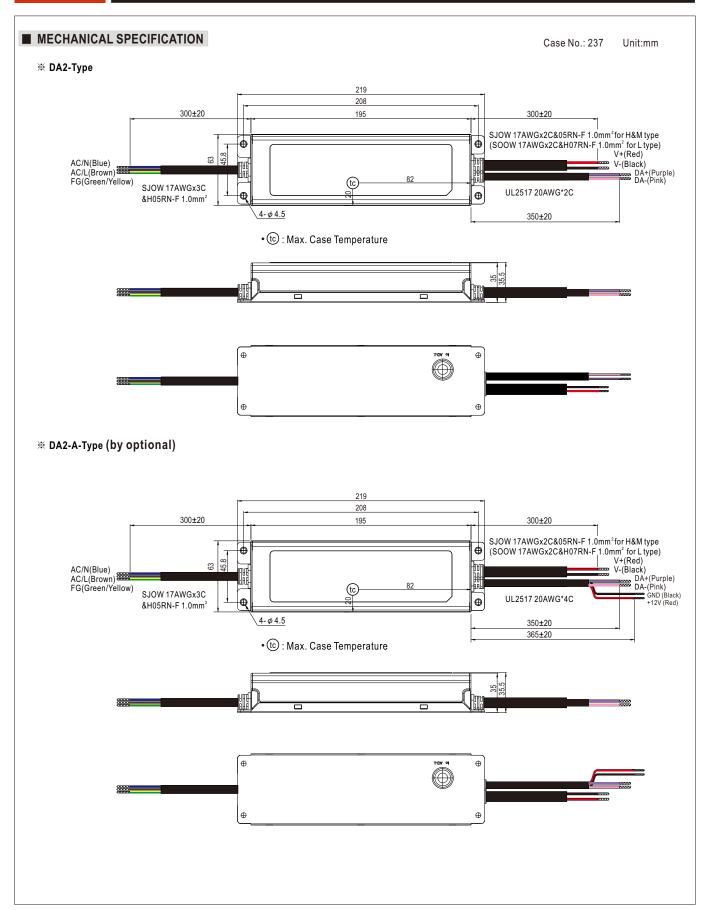


#### ■ LIFE TIME

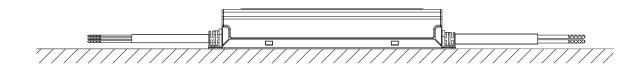
LIFETIME(Kh)



Tcase ( $^{\circ}\!\mathbb{C}$ )



# ■ Recommend Mounting Direction



#### **■ INSTALLATION MANUAL**

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