

Наличие и актуальные цены на

# **ELGC-300-M-ADA**

https://www.mean-well.ru/store/ELGC-300-M-ADA/









#### Features

- Full power at 65~100% operation(Constant Power)
- · Protection Functions: OCP,SCP,OVP,OTP
- · IP67 design for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
   3 in 1 dimming (dim-to-off); DALI-2 dimming
- Typical lifetime>50000 hours and 5 years warranty
- Surge protection with 6KV/4KV
- Latest safety requirements of IEC61347/GB19510 and UL8750

## Description

# Applications

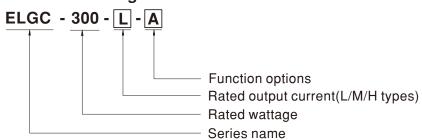
- LED bay lighting
- · LED stage lighting
- · LED flood lighting
- · LED fishing lighting
- LED horticulture lighting
- · Stadium lighting
- Type "HL" for use in class I, Division 2

### **■** GTIN CODE

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

ELGC-300 series is a 300W LED AC/DC driver featuring the constant power mode and high voltage output. ELGC-300 operates from 100~305VAC and offers models with different rated current ranging between 1300mA and 8000mA. Thanks to the high efficiency up to 94.5%, with the fanless design, the entire series is able to operate for -40°C~+85°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. ELGC-300 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	Blank type available by modification	By request
Α	IP67	Output constant power adjustable via built-in lo potentiometer	In Stock
AB	AB IP67 Output constant power adjustable via built-in lo potentiometer + 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)		In Stock
ADA	IP67	DALI-2 control technology with Io Adjustable via built-in Potentiometer	In Stock
D2	IP67	Built-in Smart timer dimming and programmable function.	By request

### 300W Constant Power Mode LED Driver

#### **SPECIFICATION**

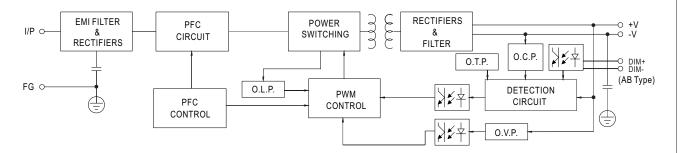
MODEL			ELGC-300-L-	ELGC-300-M-	ELGC-300-H-		
	DEFAULT CURR	ENT	1400mA	2800mA	5600mA		
	RATED POWER	(200 ~ 305VAC)	301W	301W	301		
	KATED FOWER	(100 ~ 180VAC)	256W	256W	256W		
	CONSTANT CURREN	NT REGION	116 ~232V	58 ~ 116V	29 ~ 58V		
	FULL POWER CUI	RRENT RANGE	1300~2000mA	2600~4000mA	5200~8000mA		
DUTPUT	OPEN CIRCUIT VOLTAGE (max.)		240V	120V	62V		
	CURRENT	(200 ~ 305VAC)	650~2000mA	1300~4000mA	2600~8000mA		
	ADJ. RANGE	(100 ~ 180VAC)	650~1700mA	1300~3400mA	2600~6800mA		
	CURRENT RIPPLE		5.0% max. @rated current				
	CURRENT TOLERANCE		±5%				
	SET UP TIME	Note.9	500ms/230VAC, 500ms/115VAC				
			100 ~ 305VAC 142VDC ~ 431VDC				
	VOLTAGE RANG	E Note.2	(Please refer to "STATIC CHARACTERISTIC" ang "DRIVING METHODS OF LED MODULE"section)				
	FREQUENCY RA	NGF	47 ~ 63Hz				
	- NEGOENO I IO						
	POWER FACTOR (Typ.)		PF≥0.97 / 115VAC, PF≥0.95 / 230VAC, PF≥0.92 / 277VAC at full load (Please refer to "Power Factor Characteristic" section)				
			,				
	TOTAL HARMONIC DISTORTION		THD< 10% (@ load ≥ 50% at 115VAC/230VAC,@load ≥ 75% at 277VAC)  Please refer to "TOTAL HARMONIC DISTORTION (THD)" section				
	EFFICIENCY /T.	\		1	00.5%		
INPUT	EFFICIENCY (Ty		94.5%	93.5%	92.5%		
F	AC CURRENT (T		3A / 115VAC 1.6A / 230VAC 1.3A / 277VAC				
	INRUSH CURRE		COLD START 45A(twidth=1200µs measured at 50% Ipeak) at 230VAC; Per NEMA 410				
	MAX. NO. of PSI		2 unit(circuit breaker of type B) / 4 units(circuit breaker of type C) at 230VAC				
	CIRCUIT BREAK						
	LEAKAGE CURRENT		<0.75mA / 277VAC				
	STANDBY POWER CONSUMPTION Note.5		Standby power consumption <0.5W for AB / ADA-Type(Dimming OFF)				
	SHORT CIRCUIT		Constant current limiting, recovers automatically after fault condition is removed				
			241 ~ 275V	121 ~ 145V	61 ~ 78V		
ROTECTION			Shut down output voltage, re-power on to r	ecovery			
			Tcase>85 $^{\circ}$ C $\pm 5^{\circ}$ C, derate power automatically by 6% $^{\circ}$ C max				
	WORKING TEMP		Tcase=-40 ~ +85°C (Please refer to "OUTP	<u> </u>			
	MAX. CASE TEN		Tcase=+85°C	,			
	WORKING HUMI		20 ~ 95% RH non-condensing				
NVIRONMENT	STORAGE TEMP		-40 ~ +80°C, 10 ~ 95% RH non-condensing				
}	TEMP. COEFFIC		,	¥			
		IENI	±0.03%/°C (0 ~ 60°C)				
	VIBRATION		10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes				
	SAFETY STANDARDS		UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 independent, BS EN/EN62384; EAC TP TC 004; GB19510.1 , GB19510.14; IP67; KC61347-1, KC61347-2-13 approved; Designed refer to AS/NZS 61347 & AS/NZS 60598				
	DALI STANDARDS		Compliance to IEC62386-101,102,207 for ADA Type only				
	WITHSTAND VOLTAGE		I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC				
SAFETY &	ISOLATION RESISTANCE		I/P-O/P, I/P-FG; O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH				
EMC	EMC EMISSION		Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (@ load≥50%); BS EN/EN61000-3-3;GB/T 17743,GB17625.1;KN15				
	EMC IMMUNITY		Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV);KN61547				
	MTBF		1637.5K hrs min. Telcordia SR-332 (Bellcore) ;170.1K hrs min. MIL-HDBK-217F (25°C)				
-	LIFETIME Note.4						
OTHERS			246*77*39.5mm (L*W*H)				
}	DIMENSION		246"//"39.5mm (L"W"H) 1.45Kg;9pcs/14Kg/0.76CUFT				
	PACKING	NOT : "	0.1				
NOTE	2. De-rating may	be needed ur considered as a	nder low input voltages. Please refer to "ST a component that will be operated in comb	ut, rated current and 25°C of ambient temp "ATIC CHARACTERISTIC" sections for det ination with final equipment. Since EMC pa "EMC Directive on the complete installation	tails. erformance will be affected by the		

- 3. 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)
- 4. This series meets the typical life expectancy >50,000 hours of operation when Tcase, particularly (tc) point (or TMP, per DLC), is 70 °C or less.
- 5. 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.
- 6. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 7. 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).
- 8. 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
- 9. Based on IEC 62386-101/102 DALI power on timing and interruption regulations, the set up time needs to test with a DALI controller which can support for DALI power on function, otherwise the set up time will be higher than 0.5 second for DA type.
- 10. RCM is on a voluntary basis. Non IC classification Independent LED control gear is not suitable for residential installations.
- 11. Products sourced from the Americas regions may not have the ENEC/BIS/CCC/KC logo. Please contact your MEAN WELL sales for more information.
- $\times$  Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



#### ■ BLOCK DIAGRAM

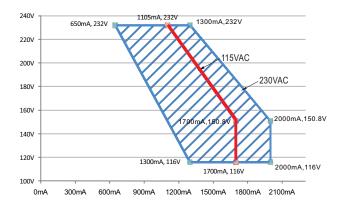
PFC fosc : 45KHz PWM fosc : 100KHz



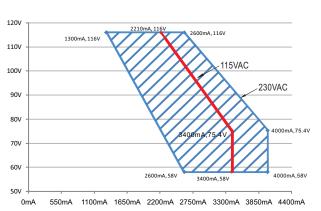
#### ■ DRIVING METHODS OF LED MODULE

※ I−V Operating Area: (Red Line for AC 115V operation)

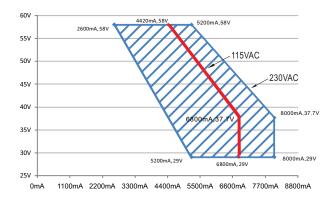
#### © ELGC-300-L



#### **○ ELGC-300-M**

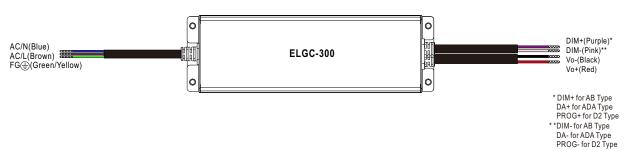


#### © ELGC-300-H



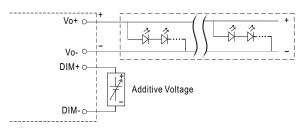


#### **■ DIMMING OPERATION**



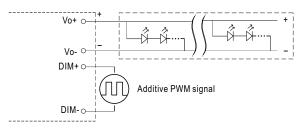
#### 3 in 1 dimming function (for AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
   0 ~ 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.)



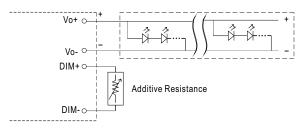
"DO NOT connect "DIM- to Vo-"

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

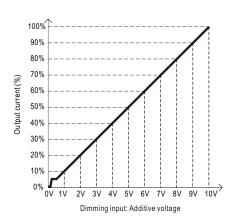


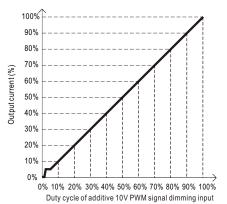
"DO NOT connect "DIM- to Vo-"

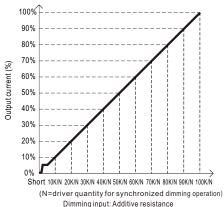
Applying additive resistance:



"DO NOT connect "DIM- to Vo-"







Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% < lout < 8%.

2. The output current could drop down to 0% when dimming input is about 0Ωor 0Vdc, or 10V PWM signal with 0% duty cycle.



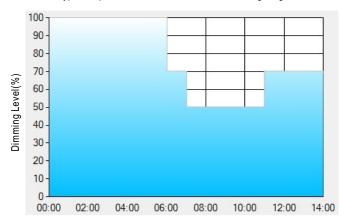
#### ※ DALI Interface (primary side; for ADA-Type)

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

#### ※ Smart timer dimming function (for Dxx-Type by User definition)

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

#### Ex: O D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program:

	T1	T2	Т3	T4
TIME**	06:00	07:00	11:00	
LEVEL**	100%	70%	50%	70%

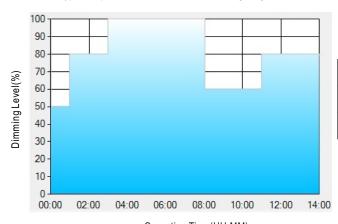
Operating Time(HH:MM)

- \*\*: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

  Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:
- [1] The power supply will switch to the constant current level at 100% starting from 6:00pm.
- [2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

  The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

#### Ex: O D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program:

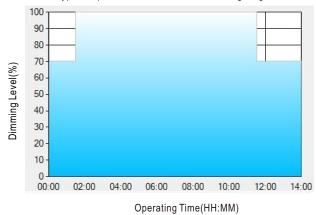
	T1	T2	Т3	T4	T5
TIME**	01:00	03:00	8:00	11:00	
LEVEL**	50%	80%	100%	60%	80%

Operating Time(HH:MM)

- \*\*: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.
  Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:
- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
- [2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.
- [5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on. The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.







Set up for D03-Type in Smart timer dimming software program:

T1		T2	Т3
TIME**	01:30	11:00	
LEVEL**	70%	100%	70%

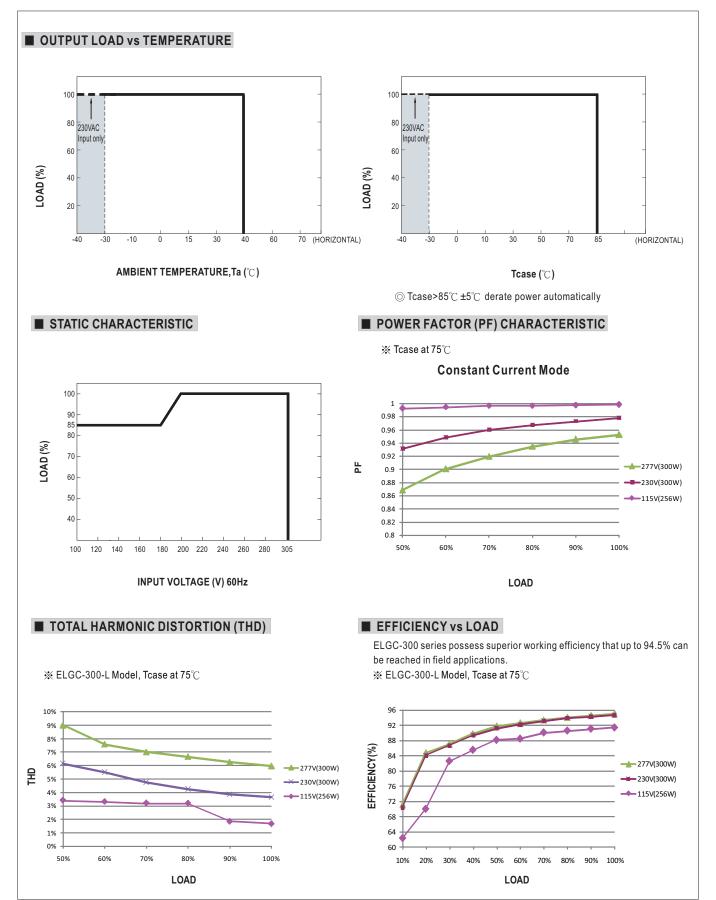
\*\*: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a tunnel lighting application adopts D03-Type, when turning on the power supply at 4:30pm, for instance:

- [1] The power supply will switch to the constant current level at 70% starting from 4:30pm.
- [2] The power supply will switch to the constant current level at 100% in turn, starting from 6:00pm, which is 01:30 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00 am, which is 11:00 after the power supply turns on.

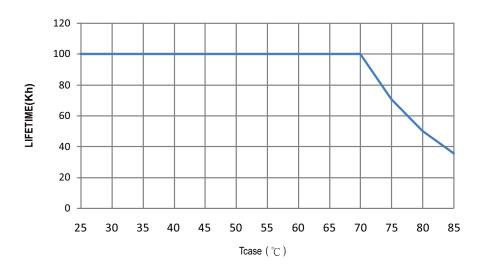
The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.



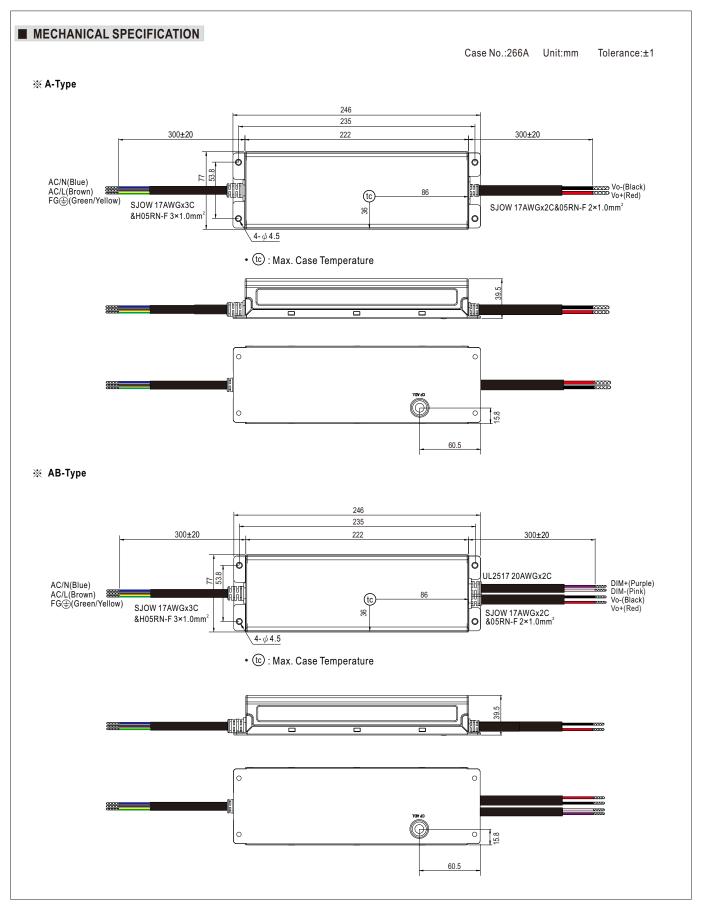




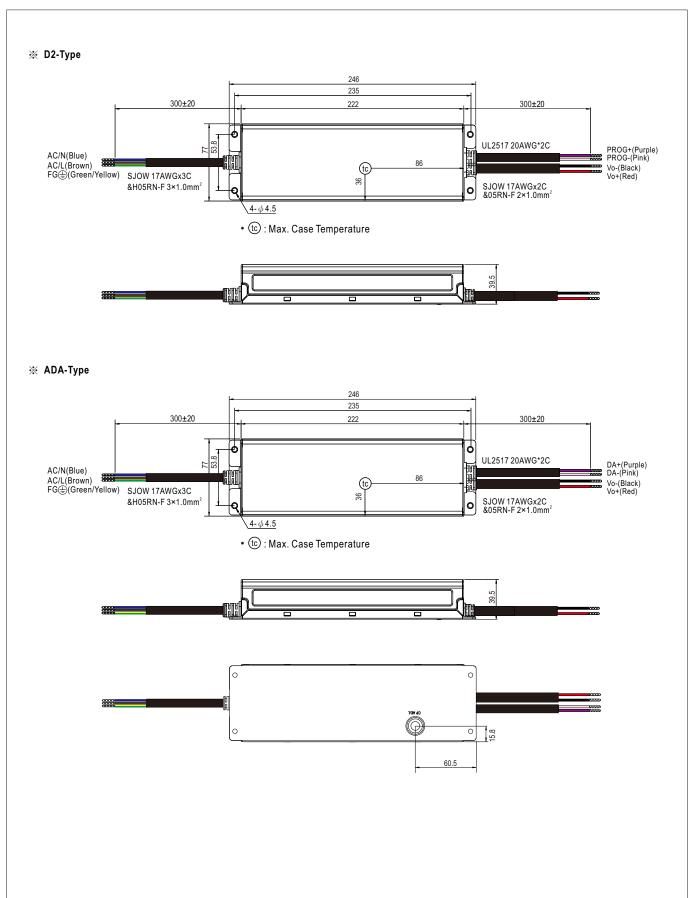
# **■** LIFE TIME





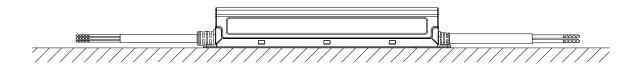








### ■ Recommend Mounting Direction



### ■ INSTALLATION MANUAL

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