# Smart LED Driver

LNA 127
Smart E-Dim 0/1-10V
DRIVER

Design and Quality EASEIC of USA

SPEC SHEET

27W 3-62V 200-1050mA 0/1-10V

Dim

LNA127
612127







**SELV RoHS** 

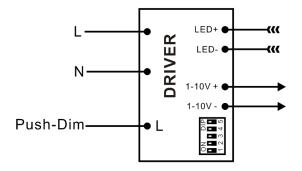
#### **Features**

- Multilevel current output, Constant current output 200-1050mA
- Multi-power driver supplied with dip-switch for the selection of the output current
- Built-in 3 in 1 dimming function(0/1-10V,PWM or Resistance)
- Dimming range from 0 -100%.
- Analogue flicker-free dimming
- PUSH-Dim, dimming and switching via push-button.
- Universal AC input (100~277Vac)
- Designed for LED lighting applications
- UL Class 2 output, Class 2 protection against electric shock for direct or indirect contact
- Supplied with terminal cover and cable retainer.
- Driver can be secured with slot for screws.
- Protections: Short circuit, Over voltage, Over Current
- 5 year warranty

#### **Benefits**

- Enables design of low profile and compact fixtures
- Helps to maximize energy savings and allows application specific light levels
- Supports majority of available dimming solutions

#### Wire Diagram



#### Note:

Install in accordance with National and Local Electrical Codes.

Use 16-24 AWG solid copper wire rated >=300V/85°C.

Strip wire 3/8".

Please pay special attention to wiring installation guidelines, Wrong wiring will cause damage to the LED driver.

Before connection the power, make sure you have access to the LED load.





#### **Electrical Specifications**

Ordering Information								
Туре	LNA127							
Order Code	612127							
Full product name	Smart 27W 3-66V 200-1050mA 0/1-10V Dim							
Input Information								
Line Voltage	100-240Vac rms							
Line Current	0.36A@100VAC	<u> </u>						
Line Frequency	50/60Hz							
Min, Mains Voltage operational	90[min]							
Max, Mains Voltage operational	277[max]							
THD(total)	<10%							
Power Factor(PF)	> <u>0.95@230V</u> full load							
Input Power (Max.)	31.5W							
Efficiency @Max Load and 70°C case	87%@100VAC	87%@120VAC	88%@230VAC					
Inrush Current(Typ.)	Cold Start 33A(twidth	=270us measured at 50%	lpeak) at 230VAC					
Leakage Current(Typ.)	<0.5mA/230VAC							
Output Information								
Output Power	27W(See Output curr	27W(See Output current settings table)						
Output voltage	3V to 66V							
Output Constant Current	200-1050mA ±5%(See Output current settings table)							
Maximum open circuit voltage	<77V							
Output Current Ripple	2% of nominal output voltage (whichever is greater), measured at 20Mhz							
(ripple=peak to peak)	bandwidth with 0.1uf ceramic capacitor in parallel with 10uf electrolyt capacitor connected at the end of the output connector.							
Protections	Over Current, Over Voltage,							
Trocccions	Short Circuit and Open Circuit Protection for LED+ and LED-							
Ambient Temp Range	-20°C to +50°C, 20-95% RH non-condensing							
Max Case Temperature(Tc)	75°C for Life & 85°C for UL Safety							
Dimming Features								
Dimming Interface	0/1-10V, Push-Dim, 10k	C PWM, Resistance,						
0/1-10V Dimming Specifications	Sink Current <0.5mA							
Dimming range	0-100%							
Environment & Approbation								
Environmental Protection Rating	UL damp and dry							
Agency Approbations	UL8750,UL1310, CSA-C22.2 No.250.0-08,ENEC EN61347-1,EN61347-2-13 independent, EN62384,TUV EN60950-1							
Electromagnetic Compliance	FCC Title 47 Part 15 Class A Compliance to EN55015,EN61000-3-2 Class C(@100% Load);en6100-3-3 Compliance to EN61000-4-2,3,4,5,6,8,11;EN61547,EN55024, light industry level(surge 2KV), criteria A							
Audible noise	<24dB Class A							
Other information								
Dimension	167x39x30mm (LxWx	¢Η)						
Packing	0.15Kg(0.37lbs); 42P	,						

All the specifications are typical and at 25  $\,^o\!CT$  case unless specified otherwise





## **Output Current Settings**

LNA127, Constant Current output 200-1050mA.

Multi-power driver supplied with dip-switch for the selection of the output current. Factory default setting is 200mA.

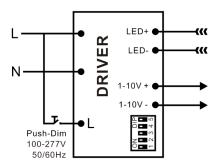
LNA127	J		DIP-Switch Settings					
Pout Max.	Vout DC	lout DC	1	2	3	4	5	
I3W	3-66V	200mA						
16W	3-66V	250mA	ON					
20W	3-66V	300mA		ON				
23W	3-66V	350mA	ON	ON				
26W	3-65V	400mA			ON			
27W	3-60V	450mA	ON		ON			
27W	3-54V	500mA		ON	ON			
27W	3-49V	550mA	ON	ON	ON			
27W	3-45V	600mA	ON	ON		ON		
27W	3-41V	650mA			ON	ON		
27W	3-38V	700mA	ON		ON	ON		
27W	3-36V	750mA		ON	ON	ON		
27W	3-33V	800mA	ON	ON	ON	ON		
27W	3-31V	850mA	ON	ON		ON	ON	
27W	3-30V	900mA			ON	ON	ON	
27W	3-28V	950mA	ON		ON	ON	ON	
27W	3-27V	I000mA		ON	ON	ON	ON	
27W	3-25V	1050mA	ON	ON	ON	ON	ON	





#### **Dimming Control Wiring Diagrams**

Push-dim 0-100% dimming control



By pressing the push button for less than one second the LEDs turn on or off. By pressing the push button for more than one second the light intensity of the LEDs is dimmed according to the following modalities:

- If the light intensity is not at maximum, by pressing the key there will be an increase of this to maximum or to the corresponding level at the moment the key is released;
- A further pressure on the key inverts the dimming direction to the minimum value or to the corresponding level at the moment the key is released;
- If light intensity is at maximum by pressing the key there will be a decrease to the minimum value or to the corresponding level at the moment the key is released.

Total length of PUSH cables <20m. Factory dimming setting at 100%.



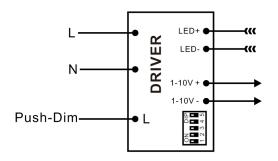
Note: Only use self-reset push button without indicator light. Risk of short circuit. The self-reset button can only be linked between the Push-dim and the L(AC).

Do Not connect the self-reset button to the N(AC)





#### > 0/1-10V interface dimming control



DC 0/I-10V interface dimming function, output constant current level can be adjusted through output terminal by DC 0/I-10V or 10V PWM signal between dimming control interface  $\pm$  and  $\pm$ .

♦ 0/1-10V dimming function for output current adjustment (Typical)

<b></b>	Dign-control Value	0V	IV	2V	3V	4V	5V
	Offtput Current	0%	10%	20%	30%	40%	50%
-	Dim-control Value	6V	7V	8V	9V	10V	Open
-	h Output Current	60%	70%	80%	90%	100%	100%

0

/ 1-10V LED dimming drivers will consume 0.5mA control terminal of the current.

♦ 10V PWM signal for output current adjustment (Typical): Frequency range : IKHz - 3KHz

^	Duty Value	0%	10%	20%	30%	40%	50%
/	Output Current	0%	10%	20%	30%	40%	50%
	Duty Value	60%	70%	80%	90%	100%	100%
1.	Output Current	60%	70%	80%	90%	100%	100%

### I-10V Interface Lighting Controller







DRF02E



DRF01E



DBC410A



DRF02U



DRF CCTU

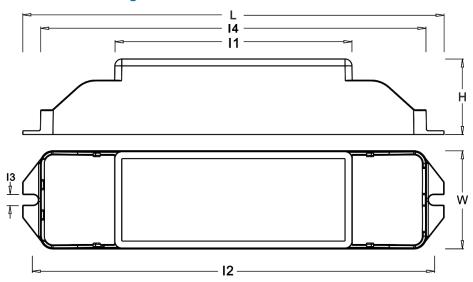
More 0/1-10V Lighting control modules and details , please browse www.easeic.com





#### **Mechanical Specifications**

#### Mechanical Drawing:



#### **Dimensions**

	In.	mm
Case Length(L)	6.6	167
Case Width(W)	1.5	39
Case Height(H)	1.2	30
Mounting Holes(II)	3.8	95
Mounting Holes(I2)	6.3	160
Mounting Holes(I3)	0.18	4.5
Mounting Holes(I4)	6.0	154
Overall Length	6.6	167

## Suggested max. number of the LNX units that can be connected to a MCB@230VAC

MCB	B10	B16	C10	C16
LNA136	10	16	17	28

Note: These calculated values are based on MCB S201 series manufactured by ABB

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