

## **Features**

- · Metal casing
- Two stage PFC
- · High efficiency
- IP20
- 5-year warranty (please refer to the warranty condition)





# **Applications**

Commercial lighting · indoor-office lighting · decorative lighting · residential lighting

# **Descriptions**

LF-GMR065YS-ELS003 is a 65W constant current LED driver. Its input voltage ranges from 220 to 240Vac and output voltage from 40 to 110Vdc. Its output current is adjustable from 550 to 700mA via DIP switch with every 50mA as a step. It is suitable for Class I light fixtures like tri-proof light and linear light.

### **Product Model**

ELS003: customized serial number
 Y: complies with certifications; S: serial number
 065: output power: 65W
 G: isolated design; MR: indoor metal casing tri-proof light



## **■** Electrical Characteristics

Model		LF-GMR065YS-ELS003				
	Output Voltage	40-110Vdc	40-110	Vdc 40-	100Vdc	40-93Vdc
	Output Current	550mA	600n	nA 6	50mA	700mA
	Ripple Current (100Hz)	<5%				
	Flicker Index	Complies with IEI	EE Std 1789-20	15		
Output	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	$\pm 5\%$				
	Temperature Drift	±10%				
	Start-up Time	<0.5S@230Vac				
	Rated Input Voltage	220-240Vac				
	Input Voltage Range	198-264Vac				
	DC Input Voltage Range	180-264Vdc <sup>①</sup>				
	Input Frequency	0/50/60Hz				
	Input Current	0.5A Max				
	PF	≥0.95				
Input	THD	≤15%				
	Efficiency	≥91%				
	Inrush Current	≤50A <sup>®</sup>				
	Loading Quantities	Model	B10	C10	B16	C16
	of Circuit Breaker	Quantity (pcs)	9	15	15	25
	Leakage Current	≤0.7mA				
	No-load Consumption	≤0.5W				
	Open Circuit	<160Vdc				
Protection Characteristics	Over Voltage	No output or damage when powering on 380Vac				
	Short Circuit	Hiccup mode(auto-recovery)				
	Operating Temperature	-30°C - +50°C				
Environment	Operating Humidity	0-95%RH (no condensation)				
Environment Descriptions	Storage Temperature/ Humidity	-30°C - +80°C (6 months in Class I environment); 0-95%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				



## **■** Electrical Characteristics

Surge	L-N	2kV		
J	L/N-PG	2kV		
	Certifications	Complies with CE and EAC		
	Withstand Voltage	I/P-O/P: 3.75kV&5mA&60S; I/P-PG: 1.5kV&5mA&60S; O/P-PG:		
	Insulation Resistance	0.5kV&5mA&60S		
Safety & EMC	insulation Resistance	I/P-O/P: >100MΩ@500Vdc		
	Safety Standards	EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 TP TC 004/2011+TP TC 020/2011		
	EMI	EN55015, EN61000-3-2, EN61000-3-3		
	EMS	EN61000-4-2,3,4,5,6,11		
	IP Rating	IP20		
Other	RoHS	RoHS 2.0 (EU) 2015/863		
Parameters	Tc Max	85°C		
	Warranty	5 years <sup>®</sup>		
Test Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test): Everfine LFA-3000, etc.			
Test Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, maximum output power and input voltage of 230Vac/50Hz.			
Additional Remarks	<ol> <li>It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.</li> <li>The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.</li> <li>It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected.</li> </ol>			

### Notice:

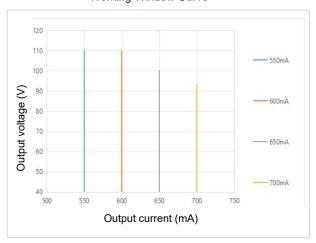
- ①: DC input is only for emergency with the maximum using time of 90 mins.
- 2: @220uS
- ③: 5 years @Tc≤79°C

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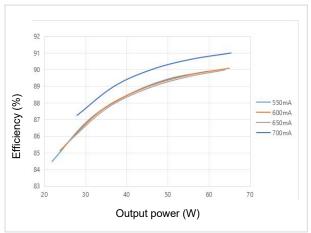


# **■ Product Characteristic Curves**

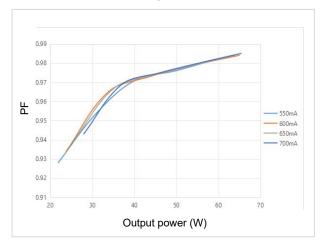
## Working Window Curve



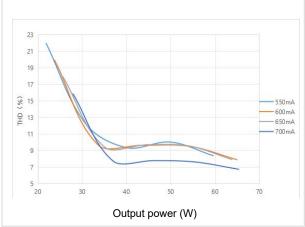
# **Efficiency Curve**



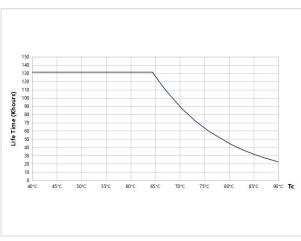
PF Curve



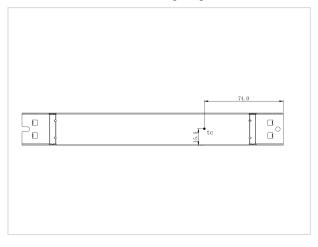
**THD Curve** 



Lifetime Curve



Tc Point Testing Diagram



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## **■** Product Definitions

#### **Product Terminal**

INPUT		
AC-L	AC live wire input	
AC-N	AC neutral wire input	
<b>=</b>	Earth wire	

OUTPUT			
LED+	Positive electrode output of LED driver		
LED-	Negative electrode output of LED driver		

## Product DIP Switch

I rated (CC)	1	2
550mA	-	-
600mA	ON	
650mA	-	ON
700mA	ON	ON

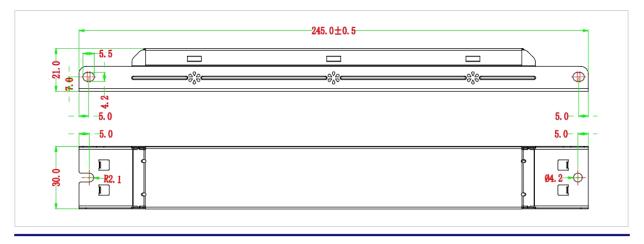
Remark: "-": shift OFF. DIP when power on is NOT allowed. Please disconnect the AC power before DIP.

# ■ Structure & Dimensions (unit: mm)

### **Product Dimensions**

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes (L)	Diameter of Positioning Hole (D)
LF-GMR065YS-ELS003	245*30*21mm(±0.5mm)	235mm (±0.5mm)	4.2 mm

## Structure Diagram



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# Packaging Specifications

Model	LF-GMR065YS-ELS003
Carton Size	385*285*210mm (L*W*H)
Quantity	8 pcs/layer; 7 layers/ctn; 56 pcs/ctn
Weight	0.18±5% kg/pc; 11.14±5% kg/ctn

# ■ Transportation and Storage

### 1. Transportation

- · Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

## 2. Storage

The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which
have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to
be qualified.

### **Cautions**

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- · Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.