

SPECIFICATION FOR APPROVAL**Customer:** _____**Product Material No. :** _____**Model No.** _____ **LF-GMR020YE** _____**Version :** _____ **V3.1** _____**Manufacturer:** _____ **Sichuan Ledfriend Technology Co., Ltd** _____**Customer Approval**

Tested by	Checked by	Approved by

Ledfriend Approval

Tested by	Checked by	Approved by

The full model numbers required by customers

Full model No.		Full model No.	
Full model No.		Full model No.	

E.C. List

Version	Description of change	Engineer	Date
3.0	format change	Chen Siyu	2015-10-27
3.1	new model number added	Chen Siyu	2015-10-31

Shenzhen Ledfriend Optoelectronics Co., Ltd.
4&5/F, Bldg 14A, Taihua Wutong Island, Gushu Development Zone, Xixiang Street, Bao'an District,
Shenzhen, China 518126
www.lifud.com, China service hotline: 400-096-6815 (China technical support: 13410244507)

Model	LF-GMR020YE	Series	AC220-240V typical linear metal case
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1. Product description



Isolated LED driver, originally designed for class I LED luminaires and also suitable for the class II luminaires.

Category: AC220-240V typical metal case series.
 Product properties: active PFC, high PF, high efficiency, low THD.
 Application: LED tri-proof lights and other types of linear lights.
 Warranty: 5 years (please refer to the warranty condition).

Certifications:



2. Technical data (1)

	Full model number	LF-GMR020YE0200 H(U) CE compliant, not certified, non-standard specs	LF-GMR020YE0300 H(U)	LF-GMR020YE0350 H(U)	LF-GMR020YE0400 H(U)	
Output	Output voltage	27-40VDC	27-40 VDC	27-40VDC	27-40 VDC	
	Output current	200mA	300mA	350mA	400mA	
	Ripple current	< 100mA	< 250mA			
	Ripple voltage	<4V				
	Current tolerance	±5%				
	Time to light	230Vac <0.5S				
	Temperature drift	±10%				
	Output Line regulation	±5%				
Input	Input Line regulation	±5%				
	Rated input voltage	220-240 Vac, (Max. input voltage: 180-264Vac)				
	Frequency	47Hz-63Hz				
	Input current	0.2A Max				
	Power factor	≥0.92@230Vac				
	THD	≤20%@230Vac				
	Efficiency	≥85%@230Vac	≥87%@230Vac			
	In-rush current (peak /duration)	I<60A/200uS@230Vac				
Typ. power input on stand-by	Pin<1W					
Protective features	No-load	Max. output voltage (no-load voltage) 55V				
	Short-circuit	Hiccup mode (auto-recovery)				
Environment condition	Working temperature	-30°C - +50°C				
	Working humidity	20-90%RH (no condensation)				
	Storage temperature/humidity	-40°C ~ +80°C (6 months under the class I environment); 10-90%RH (no condensation)				
	Atmospheric pressure	86-106KPa				
Safety and norms	Certifications	TUV, CE, RCM, CB				
	Hi-pot test	I/P-O/P:3.75KVAC,<5mA,60S I/P-PG:1.6KVac,<5mA, 60S				
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ				
	Surge level	Comply with IEC61000-4-5(L/N:2KV,L/PG:4KV,N/PG:4KV)				
	EMI	Comply with EN55015 , EN61000-3-2.				
EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.					
Others	Packing (weight)	Net weight: 105g±5%/pc; 48pcs/carton; 6.0KG±5%/carton. Carton size: 39 x 29 x 21 cm (L xWxH).				
	IP level	/				
	Warranty condition	5 years (Max. case temperature must not exceed 65°C).				
Testing equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightening surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.					
Test conditions	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% output load.					
Additional Remark	1. In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity. 2. The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94V-0 fire rating level or above. 3. As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.					

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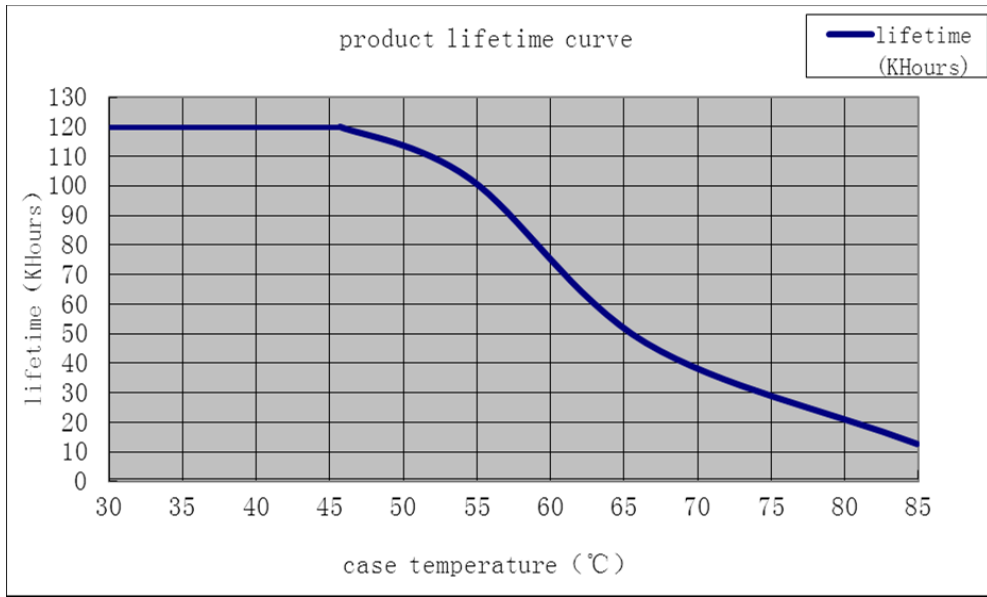
Technical data (2)

	Full model number	LF-GMR020YE0450 H(U)	LF-GMR020YE0500 H(U)	LF-GMR020YE0300 H(V)	LF-GMR020YE0350 H(V)	
Output	Output voltage	27-40 VDC	27-40 VDC	35-55VDC	35-55VDC	
	Output current	450mA	500mA	300mA	350mA	
	Ripple current	< 250mA		<150mA		
	Ripple voltage	<4V		<5.5V		
	Current tolerance	±5%				
	Time to light	230Vac <0.5S				
	Temperature drift	±10%				
	Output Line regulation	±5%				
Input	Input Line regulation	±5%				
	Rated input voltage	220-240 Vac, (Max input voltage: 180-264Vac)				
	Frequency	47Hz-63Hz				
	Input current	0.2A Max				
	Power factor	≥0.92/230Vac				
	THD	≤20%@230Vac				
	Efficiency	≥87%/230Vac				
	In-rush current (peak /duration)	I<60A/200uS@230Vac				
	Typ. power input on stand-by	Pin<1W				
Protective features	No-load	Max. output voltage (no-load voltage) 55V		Max. output voltage (no-load voltage) 70V		
	Short-circuit	Hiccup mode (auto-recovery)				
Environment condition	Working temperature	-30℃ - +50℃				
	Working humidity	20-90%RH (no condensation)				
	Storage temperature/humidity	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)				
	Atmospheric pressure	86-106KPa				
Safety and norms	Certifications	TUV, RCM, CE, CB				
	Hi-pot test	I/P-O/P: 3.75KVac, <5mA, 60S I/P-PG:1.6KVac,<5mA,60S				
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ				
	Surge level	Comply with IEC61000-4-5(L/N:2KV, L/PG:4KV, N/PG:4KV)				
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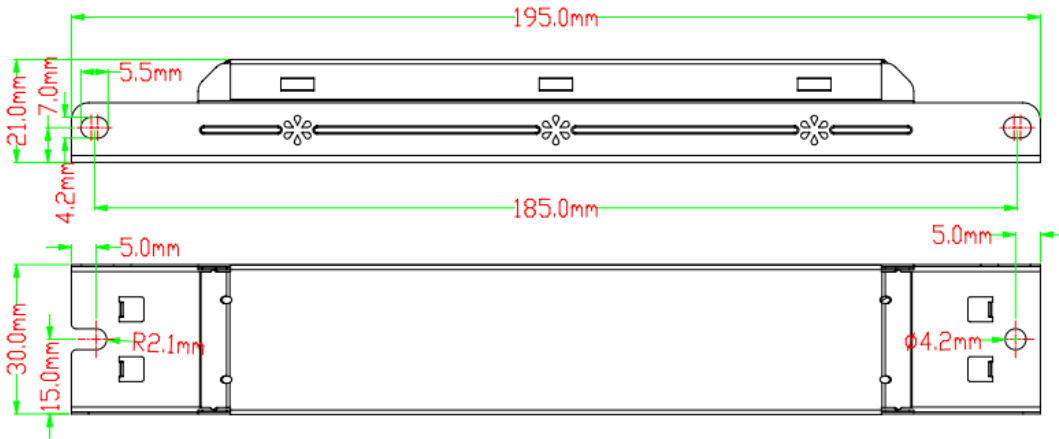
3. Product Referenced Lifetime Curve

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The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C and 85°C.



4. Dimensional Drawing (unit: mm)



5. Wire Connection Diagram:



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