

Specification for Approval

Customer: _____

Product Material No.: _____

Model No.: _____ **LF-GMR060YSII** _____

Version: _____ **V1.1** _____

Customer Approval

Tested by	Checked by	Approved by

Lifud Approval

Tested by	Checked by	Approved by
Huang Benliang	Li Long	Zhong Chunlin

Full Model Numbers Required by the Customer

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

E. C. List

Version	Description of Change	Engineer	Date
1.0	First version release	Li Long	2018-05-16
1.1	Changed the stand-by power.	Li Long	2018-07-13

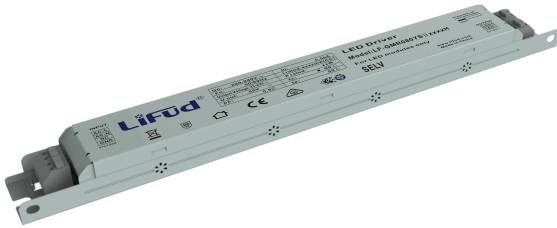
Lifud Technology Co., Ltd.

No. 26 Xinhe Blvd, Shajing, Bao'an Dist, Shenzhen, China 518104

www.lifud.com | Technical support: +86 755 83739299 (Office hour: 08:30-18:00 on working days)

Model	LF-GMR060YSII	Series	AC220-240V, Flicker-Free & Linear Driver
--------------	---------------	---------------	--

1. Product Description



Isolated LED Driver for Class I LED Luminaire

Category: AC220-240V, non-dimmable, flicker-free, linear

Property: high PF, high efficiency, low THD, flicker coefficient $\leq 0.5\%$

Application: indoor office lighting, decorative lighting, commercial lighting

Warranty: 5 years (Please refer to the warranty condition.)

Certificate: ENEC, CE, CB, RCM, SAA



2. Technical Data (1)

	Full Model Number	LF-GMR060YSII1100H	LF-GMR060YSII1150H	LF-GMR060YSII1200H	LF-GMR060YSII1250H	LF-GMR060YSII1300H
Output	Output Voltage	33-42VDC				
	Output Current	1100mA	1150mA	1200mA	1250mA	1300mA
	Ripple Voltage	< 1V				
	Current Tolerance	$\pm 5\%$				
	Time to Light	220-240Vac<0.5s				
	Temperature Drift	$\pm 10\%$				
	Line Regulation	$\pm 5\%$				
Input	Line Regulation	$\pm 5\%$				
	Rated Input Voltage	AC: 220-240V (Max. AC: 200-264V); DC: 200-373V				
	Frequency	47Hz-63Hz				
	Input Current	0.4A Max				
	Power Factor	$\geq 0.95/200\text{Vac}$				
		$\geq 0.94/230\text{Vac}$				
		$\geq 0.90/264\text{Vac}$				
	THD	$\leq 20\%$				
	Efficiency	$\geq 89\%/200\text{Vac}$				
$\geq 89\%/230\text{Vac}$						
$\geq 89\%/264\text{Vac}$						
In-Rush Current (Peak / Duration)	I < 60A/350uS@230Vac					
Stand-by Power	Pin $\leq 0.5\text{W @ }200-264\text{Vac}$					
Protective Feature	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 & Norm	Certificate	ENEC, CE, CB, RCM, SAA				
	Hi-Pot Test	I/P-O/P: 3.75KVac, < 5mA, 60s; I/P-FG: 1.6KVac, < 5mA 60s; O/P-FG: 0.5KVac, < 5mA 60s				
	Insulation Resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC, > 100M Ω				
	Surge Level	Comply with IEC61000-4-5 (L/N:1KV, L/N-PG: 2KV)				
	EMI	Comply with EN55015				
	EMS	Comply with EN61000-4-2,3,4,5,6,8,11; EN61547				
Others	Packing (Weight)	Carton size: 39 x 29 x 21 cm (L*W*H); Net weight: 200g $\pm 5\%$ /pc; 9.6KG $\pm 5\%$ /ctn; 48pcs/ctn				
	IP Level	/				
	Warranty Condition	5 years (Max. case temperature must not exceed 65°C)				

Model	LF-GMR060YSII	Series	AC220-240V, Flicker-Free & Linear Driver
--------------	---------------	---------------	--

Testing 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: TH9201B, stroboscope (flicker coefficient tester) 60N-01, etc.
Testing Condition	If there's no special statement, the parameters above, including the power factor, THD and efficiency, are the test results under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% DC load.
Additional Remark	<p>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 while using electricity.</p> <p>2. The PC cover, housing, end caps and other parts of the LED driver inside the LED luminaire must meet the UL94-V0 fire rating level or above.</p> <p>3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED luminaire. The structure and the wire routing of the light fixture are also relevant. Thus it's strongly recommended the LED luminaire manufacturer re-confirms the EMC of the whole LED luminaire.</p>

Technical Data (2)

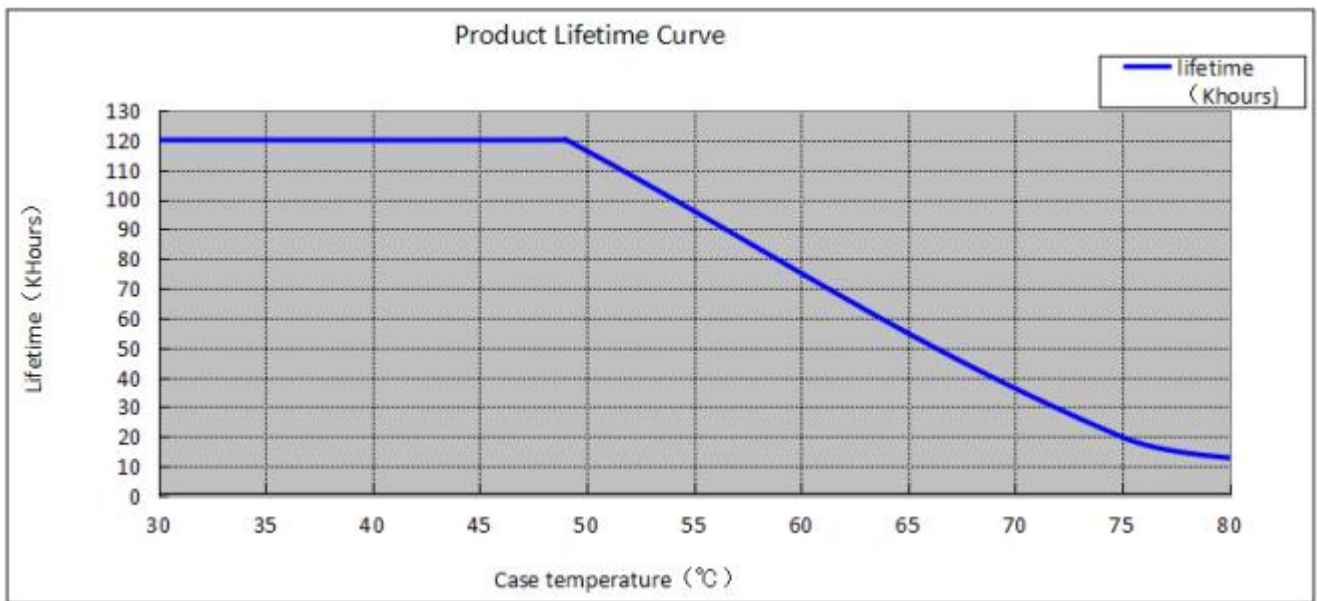
	Full Model Number	LF-GMR060YSII1350H	LF-GMR060YSII1400H	LF-GMR060YSII1450H	LF-GMR060YSII1500H	LF-GMR060YSII1550H
Output	Output Voltage	33-42VDC				
	Output Current	1350mA	1400mA	1450mA	1500mA	1550mA
	Ripple Voltage	< 1V				
	Current Tolerance	±5%				
	Time to Light	220-240Vac<0.5s				
	Temperature Drift	±10%				
	Line Regulation	±5%				
Input	Line Regulation	±5%				
	Rated Input Voltage	AC: 220-240V (Max. AC: 200-264V); DC: 200-373V				
	Frequency	47Hz-63Hz				
	Input Current	0.4A Max				
	Power Factor	≥0.95/ 200Vac				
		≥0.94/ 230Vac				
		≥0.90/ 264Vac				
	THD	≤ 20%				
	Efficiency	≥ 89% /200Vac				
		≥ 89% /230Vac				
≥ 89% /264Vac						
In-Rush Current (Peak / Duration)	I < 60A/350uS@230Vac					
Stand-by Power	Pin ≤ 0.5W @ 200-264Vac					
Protective Feature	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 & Norm	Certificate	ENEC, CE, CB, RCM, SAA				
	Hi-Pot Test	I/P-O/P: 3.75KVac, < 5mA, 60s; I/P-FG: 1.6KVac, <5mA 60s; O/P-FG: 0.5KVac, <5mA 60s				
	Insulation Resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC, >100MΩ				
	Surge Level	Comply with IEC61000-4-5 (L/N:1KV, L/N-PG: 2KV)				
	EMI	Comply with EN55015				
	EMS	Comply with EN61000-4-2,3,4,5,6,8,11; EN61547				
Others	Packing (Weight)	Carton size: 39 x 29 x 21 cm (L*W*H); Net weight: 200g±5%/pc; 9.6KG±5%/ctn; 48pcs/ctn				
	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, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, stroboscope (flicker coefficient tester) 60N-01, etc.					

Model	LF-GMR060YSII	Series	AC220-240V, Flicker-Free & Linear Driver
--------------	---------------	---------------	--

Testing Condition	If there's no special statement, the parameters above, including the power factor, THD and efficiency, are the test results under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% DC load.
Additional Remark	<ol style="list-style-type: none"> 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 while using electricity. 2. The PC cover, housing, end caps and other parts of the LED driver inside the LED luminaire must meet the UL94-V0 fire rating level or above. 3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED luminaire. The structure and the wire routing of the light fixture are also relevant. Thus it's strongly recommended the LED luminaire manufacturer re-confirms the EMC of the whole LED luminaire.

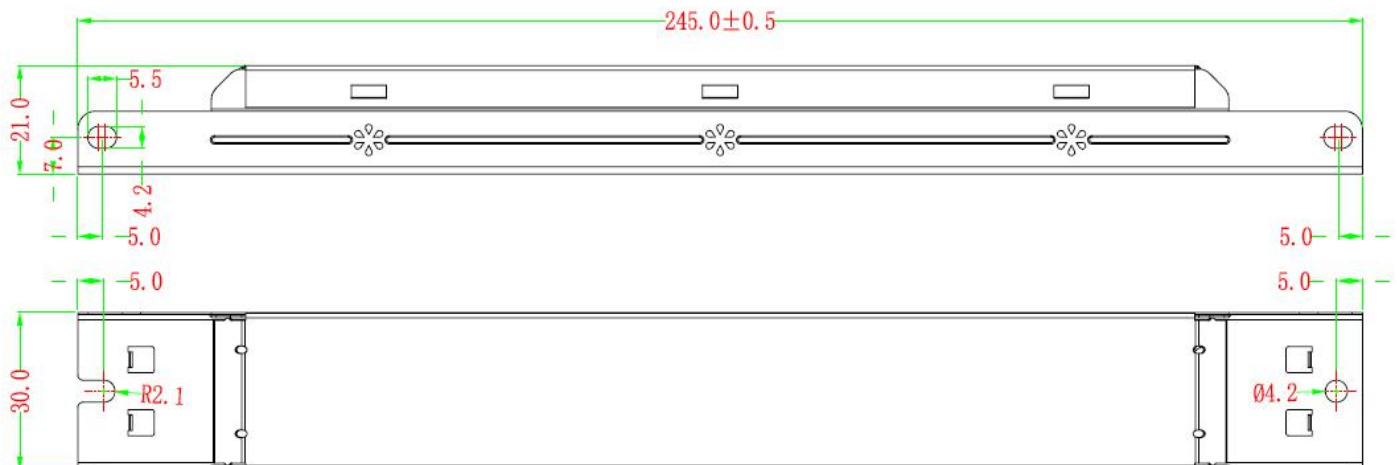
3. Product Referenced Lifetime Curve

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, 80°C.



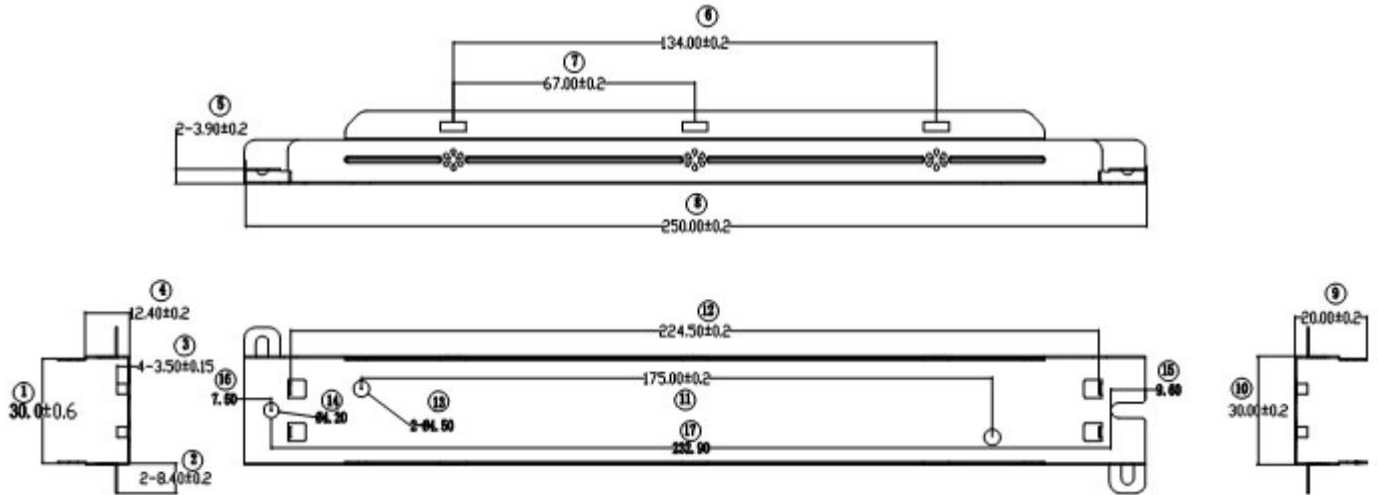
4. Dimensional Drawing (Unit: mm; Tolerance: ±0.5mm)

(1) Dimensions without ears: 245*30*21mm

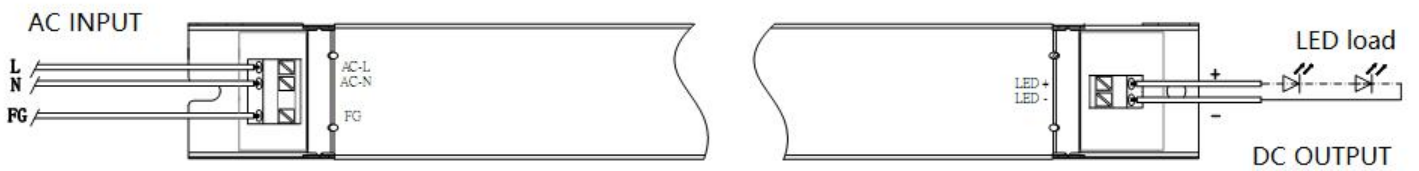


Model	LF-GMR060YSII	Series	AC220-240V, Flicker-Free & Linear Driver
--------------	---------------	---------------	--

(2) Dimensions with ears: 250*30*20mm



5. Wiring Diagram:



Model	LF-GMR060YSII	Series	AC220-240V, Flicker-Free & Linear Driver
-------	---------------	--------	--