

SPECIFICATION FOR APPROVAL

Customer: _____

Product Material No.: _____

Model No.: LF-GIR040YM

Version: V1.0

Customer Approval

Tested by	Checked by	Approved by

LIFUD Approval

Tested by	Checked by	Approved by

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	original version	Li Long	2016-09-21

Lifud Technology Co., Ltd

4&5/F, Bldg 14A, Taihua Wutong Island, Gushu, Xixiang St., Bao'an Dist., Shenzhen 518126, China
www.lifud.com | China service hotline: 400-096-6815 (China technical support: 13410240457)

Model	LF-GIR040YM	Series	AC220-240V & Cost Effective
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1. Product Description



Isolated LED Driver for Class II LED Luminaire

Category: AC220-240V, plastic case

Property: simple structure, cost effective

Application: indoor office lighting, decorative lighting, commercial lighting, and residential lighting

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

Certificate: TUV, CB, CE, RCM



2. Technical Data (1)

	Full Model Number	LF-GIR040YM0800H	LF-GIR040YM0850H	LF-GIR040YM0900H	LF-GIR040YM0950H
Output	Output Voltage	25-42Vdc			
	Output Current	800mA	850mA	900mA	950mA
	Ripple Voltage	< 4.0V			
	Current Tolerance	±5%			
	Time to Light	230Vac < 0.5S			
	Temperature Drift	±10%			
	Line Regulation	±5%			
Input	Line Regulation	±5%			
	Rated Input Voltage	220-240 Vac (Max input voltage: 180-264Vac)			
	Frequency	47Hz-63Hz			
	Input Current	0.30A Max			
	Power Factor	≥ 0.95 @ 230Vac (full load); ≥ 0.90 @ 230Vac (low load)			
	THD	≤ 20%			
	Efficiency	≥ 88% @ 230Vac			
	In-Rush Current (Peak / Duration)	I < 60A/350uS@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℃ ~ +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	Certificate	TUV, CB, CE, RCM			
	Hi-pot Test	I/P-O/P: 3.75KVac, < 5mA, 60S			
	Insulation	I/P-O/P: 500VDC, >100MΩ			
	Surge Level	Comply with IEC61000-4-5 (L/N:1KV)			
	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: 90g±5%/pc; 98pcs/ctn; 9KG±5%/ctn; Carton size: 38 x 28 x 30 cm (L*W*H)			
	IP Level	IP20			
	Warranty Condition	5 years (Max. case temperature must not exceed 80℃)			

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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, 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℃ and humidity 50%, AC input 230V and 90% DC load.
Additional Remarks	<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 of using electricity.</p> <p>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.</p> <p>3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wire routing of the light fixture are also relevant. Thus we strongly recommend the manufacturer of the finished LED light fixture re-confirm the EMC of the LED light fixture.</p>

Technical Data (2)

	Full Model Number	LF-GIR040YM1000H	LF-GIR040YM1050H
Output	Output Voltage	25-42Vdc	25-40Vdc
	Output Current	1000mA	1050mA
	Ripple Voltage	< 4.0V	
	Current Tolerance	±5%	
	Time to Light	230Vac < 0.5S	
	Temperature Drift	±10%	
	Line Regulation	±5%	
Input	Line Regulation	±5%	
	Rated Input Voltage	220-240 Vac (Max input voltage: 180-264Vac)	
	Frequency	47Hz-63Hz	
	Input Current	0.30A Max	
	Power Factor	≥ 0.95 @ 230Vac (full load); ≥ 0.90 @ 230Vac (low load)	
	THD	≤ 20%	
	Efficiency	≥ 88% @ 230Vac	
	In-Rush Current (Peak / Duration)	I < 60A/350uS@230Vac	
Protective Features	Typ. Power Input on Stand-By	Pin < 1W	
	No-Load	Max. output voltage (no-load voltage) 55V	
Environment Condition	Short-Circuit	Hiccup mode (auto-recovery)	
	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)	
Safety and Norms	Atmospheric Pressure	86-106KPa	
	Certificate	TUV, CB, CE, RCM	
	Hi-pot Test	I/P-O/P: 3.75KVdc, < 5mA, 60S	
	Insulation	I/P-O/P: 500VDC, >100MΩ	
	Surge Level	Comply with IEC61000-4-5 (L/N:1KV)	
	EMI	Comply with EN55015, EN61000-3-2	
Others	EMS	Comply with EN61000-4-2,3,4,5,6,8,11; EN61547	
	Packing (Weight)	Net weight: 90g±5%/pc; 98pcs/ctn; 9KG±5%/ctn; Carton size: 38 x 28 x 30 cm (L*W*H)	
	IP Level	IP20	
	Warranty Condition	5 years (Max. case temperature must not exceed 80℃)	

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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, 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℃ and humidity 50%, AC input 230V and 90% DC load.
Additional Remarks	<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 of using electricity.</p> <p>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.</p> <p>3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wire routing of the light fixture are also relevant. Thus we strongly recommend the manufacturer of the finished LED light fixture re-confirm the EMC of the LED light fixture.</p>

Technical Data (3)

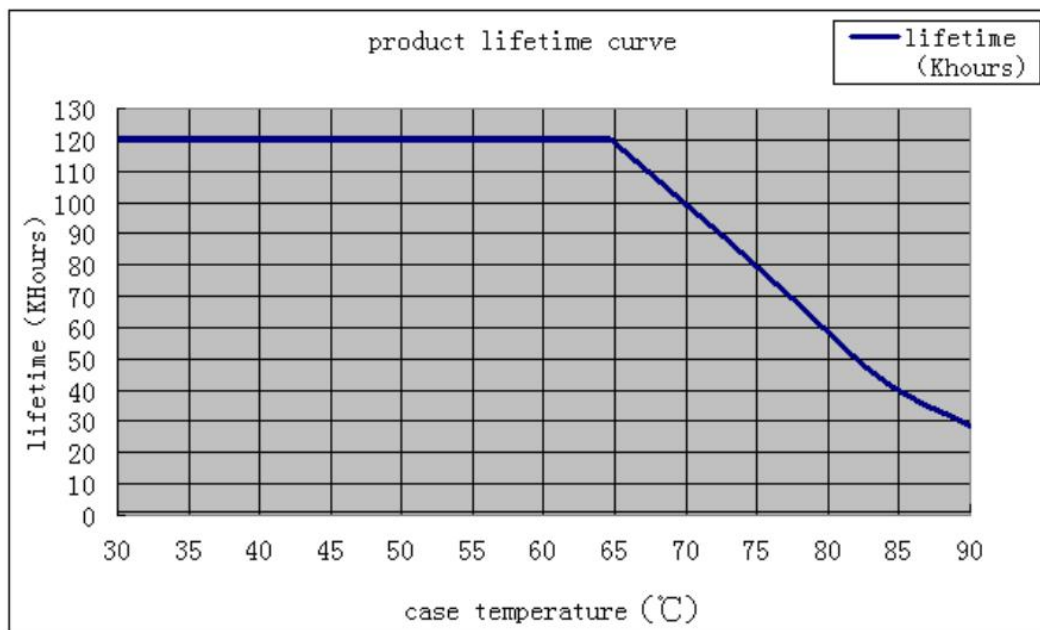
	Full Model Number	LF-GIR040YM0600H	LF-GIR040YM0650H	LF-GIR040YM0700H	LF-GIR040YM0750H
Output	Output Voltage	40-55Vdc			
	Output Current	600mA	650mA	700mA	750mA
	Ripple Voltage	< 6.0V			
	Current Tolerance	±5%			
	Time to Light	230Vac < 0.5S			
	Temperature Drift	±10%			
	Line Regulation	±5%			
Input	Line Regulation	±5%			
	Rated Input Voltage	220-240 Vac (Max input voltage: 180-264Vac)			
	Frequency	47Hz-63Hz			
	Input Current	0.30A Max			
	Power Factor	≥ 0.95 @ 230Vac (full load); ≥0.90 @230Vac (low load)			
	THD	≤ 20%			
	Efficiency	≥ 88% @ 230Vac			
	In-Rush Current (Peak / Duration)	I < 60A/350uS@230Vac			
Protective Features	Typ. Power Input on Stand-By	Pin < 1W			
	No-Load	Max. output voltage (no-load voltage) 55V			
Environment Condition	Short-Circuit	Hiccup mode (auto-recovery)			
	Working Temperature	-30℃ ~ +50℃			
	Working Humidity	20-90% RH (no condensation)			
	Storage Temperature/Humidi	-40℃ ~ +80℃ (6 months under the class I environment); 10-90% RH (no condensation)			
Safety and Norms	Atmospheric Pressure	86-106KPa			
	Certificate	TUV, CB, CE, RCM			
	Hi-pot Test	I/P-O/P: 3.75KVac, < 5mA, 60S			
	Insulation	I/P-O/P: 500VDC, >100MΩ			
	Surge Level	Comply with IEC61000-4-5 (L/N:1KV)			
	EMI	Comply with EN55015, EN61000-3-2			
Others	EMS	Comply with EN61000-4-2,3,4,5,6,8,11; EN61547			
	Packing (Weight)	Net weight: 90g±5%/pc; 98pcs/ctn; 9KG±5%/ctn; Carton size: 38 x 28 x 30 cm (L*W*H)			
	IP Level	IP20			
	Warranty Condition	5 years (Max. case temperature must not exceed 80℃)			

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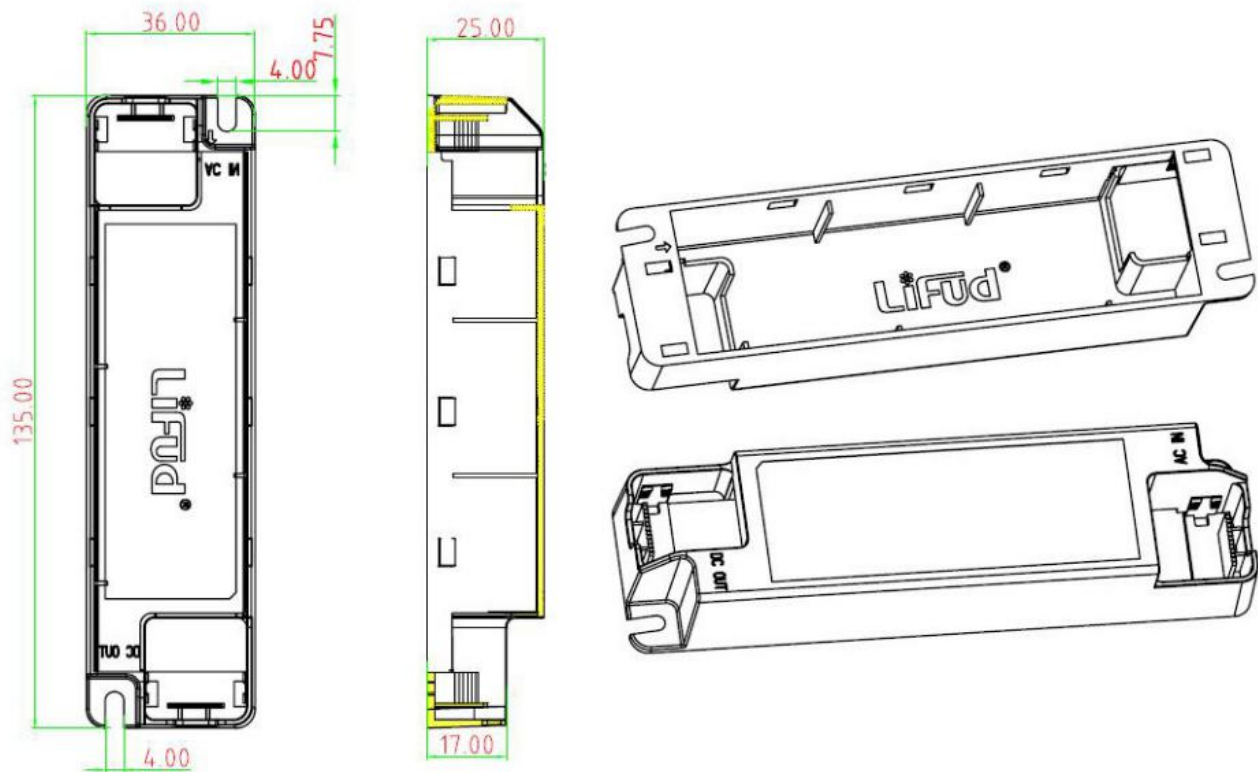
Testing Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, 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℃ and humidity 50%, AC input 230V and 90% DC load.
Additional Remarks	<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 of using electricity.</p> <p>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.</p> <p>3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wire routing of the light fixture are also relevant. Thus we strongly recommend the manufacturer of the finished LED light fixture re-confirm the EMC of the LED light fixture.</p>

3. Product Referenced Lifetime Curve

The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40℃, 50℃, 60℃, 70℃, 80℃ and 90℃.



4. Dimensional Drawing (unit: mm, tolerance: $\pm 0.5\text{mm}$)



5. Wiring Diagram:



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