

Product Description

LF-GMD065YSV conforms to the latest safety standards and DLC5.0 certification of North American. Its output circuit is isolated from the dimming circuit. It has three-in-one dimming function including 0-10V, PWM & Rx dimming. With upgraded dimming effect and wider output current range, this product is a better solution for your US-standard panel light.

Features

- Conforms to the latest safety standards: the output circuit is isolated from the dimming circuit
- Conforms to the latest DLC5.0 certification standards
- Upgraded dimming effect: the dimming curve becomes much smoother; the light can be dimmed to off;
 up to 10 pieces of LED drivers to be turned on and off synchronously

Application

Indoor US-standard panel light



Technical Data

Full	l Model Name	LF-GMD065YSV									
Output Voltage				25	42V						
	Output Current	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA				
	Output Current	1400mA	1450mA	1500mA	1550mA	1600mA	1650mA				
	Ripple Voltage	<2V @ 20MHz									
Output	Percent Flicker	Meet the US standards									
	Current Tolerance	±5%									
	Temperature Drift	±10%									
	Line Regulation	±5%									
	Start-up Time	<1s									
	Line Regulation	±5%									
	Rated Input Voltage	100-277VAC									
	Input Frequency Range	47Hz-63Hz									
	Input Current	0.9A Maximum									
	Power Factor	≥0.95 @ 120VAC									
	Power Factor	≥0.90 @ 277VAC / 33-42VDC									
Input	Total Harmonic Distortion	≤20%									
	Efficiency	≥86% @ 120VAC; ≥87% @ 277VAC									
	Inrush Current	≤60A & 300uS @ 230VAC									
	Quantity of the same model of power supply that can be configured by a circuit breaker.	Under the condition of 230VAC, the total quantity of the same model of power supply that can be configured by a type-B 16A circuit breaker is 28 pieces.									
	Standby Power Consumption	≤1W (dim-to-off)									
	Output Short-Circuit Protection	Hiccup mode	(auto-recovery)								
Protection	Output Open-Circuit Protection	<55V									
	Output Overvoltage Protection	<55V									
	Working Temperature	-30℃ ~ +50℃									
	Working Humidity	•	o condensation	-							
Environment Condition	Storage Temperature/Humidity		(six months und o condensation	ler class I enviro)	onment);						
Johnson	Atmospheric Pressure	86KPa-106KF	Pa								
	Vibration	sweep-freque	ncy: 1.0oct/min	z ~ 9Hz 1.2mm ; test time: XYZ ng to system set	Z, 30 min each	amplitude: 9Hz ; The driver wa	~ 200Hz 1G; s in operating				



LF-GMD065YSV Dimmable & Flicker free LED Driver for Panel Light

	Certificate	UL, FCC, Class P
	Withstand Voltage	I/P-O/P: 3.75KV, 5mA, 60s; I/P-GND: 1.6KV 5mA 60S
	Insulation Resistance	I/P-O/P: 500VDC, >100MΩ
	Surge Rating	IEC61000-4-5 (L-N: 1KV, L/N-PG: 2KV) , Class B
	Electrical Fast Transient / Burst	2KV (Class B)
Safety &	Ringing wave	2.5KV (Class B)
Norm	Safety Standard	UL8750, AS/NZS 61347-1: 2016
	Electromagnetic Interference	FCC Part 15B
	Electromagnetic Susceptibility	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, IEC61000-4-13
	EMI Light Fixture	LED panel light
	Electrostatic Discharge (ESD)	Air 8KV; touch 4KV (Class B)

Other Statements

	RoHS	RoHS 2.0 (EU) 2015 / 863					
Others	Warranty Condition	5 years (43,800 hours) @Tc 77 ℃					
	Noise Rating ≤20db (Tested in a soundproof room and the noise collector was the 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, spectrum analyzer: KH3935, hipot tester: TH9201B, flicker tester 60N-01, etc.						
Testing Condition	Unless otherwise stated, the parameters of the power factor, THD and efficiency are the test results under the ambient temperature of 25℃ and humidity of 50%, AC input of 230V and 100% load.						
	It is recommended that customer should install protection devices for surge and for overvoltage & undervoltage to ensure safety before connecting to electricity.						
Additional Remark	caps and other parts of the LED driver inside the LED light fixture must conform to d or above.						
	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 wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer re-confirms the EMC of the whole LED light fixture.						

RoHS: Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

ITHD: The total harmonic distortion of the current

MTBF: Mean time between failure

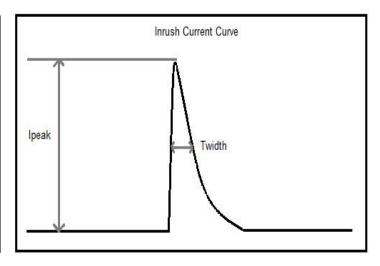
Circuit Breaker & Relevant Parameters

Name	Value	Remark
Surge peak current (Ipeak)	18.1 A	Input voltage 230Vac
Surge half-peak time (Twidth)	34 µs	Input voltage 230Vac. Measure the time for Ipeak to drop to its half value.
Quantity of the same model of driver that can be configured by a type-B 16A circuit breaker.	28 pcs (maximum)	

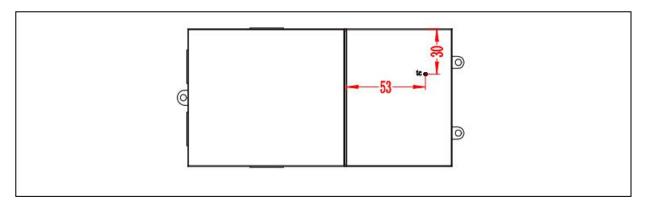


Driver quantities are below if use another type of circuit breaker.

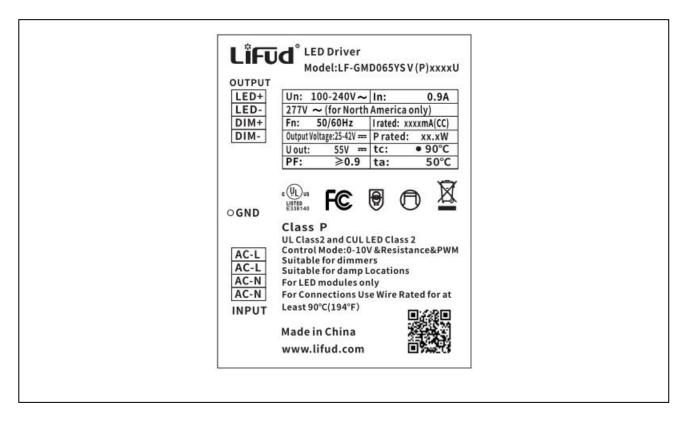
Туре	Rank	Qty of accommodated drivers	Relative conversion ratio		
	10A	17 pcs	63%		
	13A	22 pcs	81%		
В	16A	28 pcs	100% (benchmark)		
	20A	35 pcs	125%		
25A		43 pcs	156%		
	10A	29 pcs	104%		
	13A	37 pcs	135%		
С	16A	47 pcs	170%		
	20A	58 pcs	208%		
	25A	72 pcs	260%		



Tc Spot on the Upper Casing

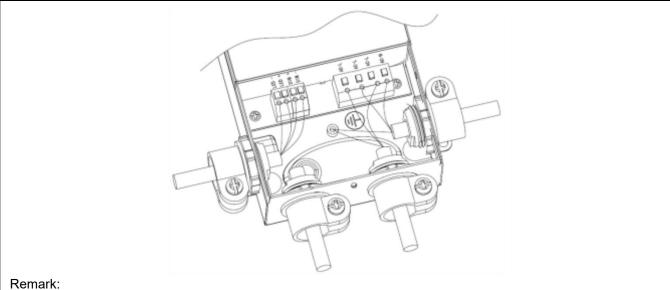


Label





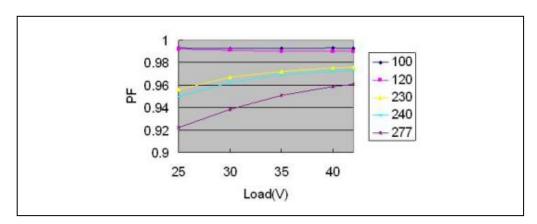
Wiring Diagram



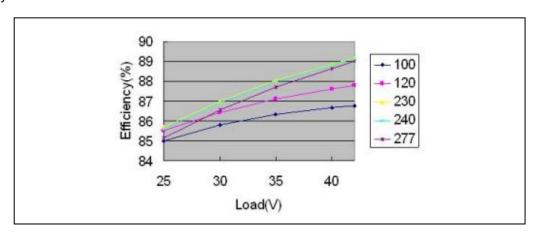
- 1. Press the screw terminals while connecting or disconnecting the wires.
- 2. Suitable wire: AWG16-20.
- 3. Peel 6-7mm of the wire. The copper wire should not be exposed after connecting to the screw terminal.

Feature Curves

1. PF curve

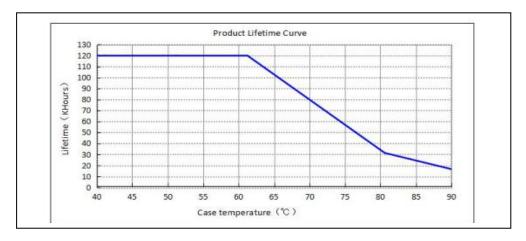


2. Efficiency curve





3. Lifetime curve



4. Dimming curve



Dimming Operation

- 1. 0-10V signal connects to the DIM terminal.
- 2. In 0-10V mode, when the input voltage is equal to or below 0.3V, the light will be turned off. When it's over 0.5V, the light will be turned on.
- 3. In 0-10V mode, the minimum dimming depth is 8% (lout).

0-10V dimming

Dimming voltage	≤0.3V	0.5V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V
Output current	OFF	100	281	511	729	881	1029	1195	1365	1513	1574	1610

PWM dimming

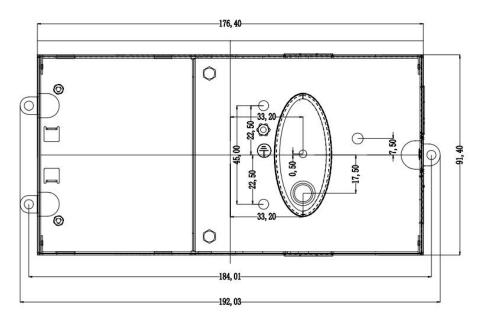
PWM signal	0-5%	8%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Output current	OFF	100	297	532	753	909	1059	1225	1389	1544	1600	1610

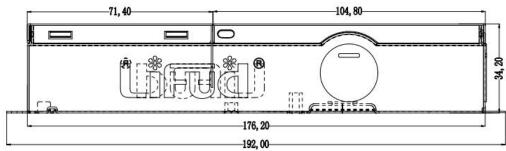
Rx dimming

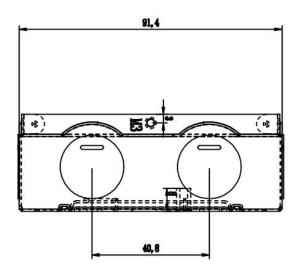
Dimming resistance	0ΚΩ	5ΚΩ	10ΚΩ	20 ΚΩ	30 ΚΩ	40 ΚΩ	50 ΚΩ	60 ΚΩ	70 KΩ	80 KΩ	90 ΚΩ	100 ΚΩ
Output current	OFF	100	259	509	684	867	1021	1193	1236	1339	1557	1610



Dimension (unit: mm, tolerance: +0.5mm)







LF-GMD065YSV Dimmable & Flicker free LED Driver for Panel Light

Packaging Specification

Carton dimension	420*300*210mm (L*W*H)
Quantity	12 pcs/layer; 2 layers/ctn; 24 pcs/ctn
Weight	420g/pc; 10.57Kg/ctn

Attention

- 1. Use this product according to the specifications, please. Otherwise there may be malfunction.
- 2. Use luminaires that have not been certified or are not compatible with the drivers may cause fire, explosion or other hazards.
- 3. Man-made damage is not covered by warranty.
- 4. The withstanding voltage of the aluminium substrate should meet the requirement.

Remark: The final interpretation right of contents of this data sheet belongs to Lifud Technology Co., Ltd.