



Product Description

The US-standard Gen-V LED driver, LF-GMD065YBV conforms to the latest safety standards of North American. Its casing structure is the same as that of the Gen-IV (LF-GMD065YBIV). Its output circuit is isolated from the dimming circuit. Three-in-one dimming 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.

Product Feature

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

Application

Indoor US-standard panel light



Technical Data

Full Model Name		LF-GMD065YBV										
Output Voltage				25-	42V							
	Output Compant	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA					
	Output Current	1400mA	1450mA	1500mA	1550mA	1600mA	1650mA					
	Ripple Voltage	<4V @ 20MHz										
Output	Percent Flicker	Meet the US standards										
	Current Tolerance	±5%	±5%									
	Temperature Drift	±10%										
	Line Regulation	±5%										
	Start-up Time	<1s										
	Line Regulation	±5%										
	Rated Input Voltage	100-277VAC										
	Rated DC Input Voltage	1										
	Input Frequency Range	47Hz-63Hz										
	Input Current	0.9 A Maximu	m									
		≥0.95 @ 120VAC										
	Power Factor	≥0.90 @ 277VAC										
	Total Harmonic Distortion	≤20%										
Input	Efficiency	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;					
		≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC					
		≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;	≥87% @ 120VAC;					
		≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC	≥88% @ 277VAC					
	Inrush Current	≤60A & 300us	6 @ 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 the can be configured by a type-B 16A circuit breaker is 28 pieces.										
	Standby Power Consumption	≤1W (dim-to-off)										
	Input Overvoltage Protection	1										
Duotoeti	Input Undervoltage Protection	1										
Protection	Output Short-Circuit Protection	Hiccup mode	(auto-recovery)									
	Output Open-Circuit Protection	<55V										



	Output Overvoltage Protection	<55V
	Output Undervoltage Protection	
	Output Overcurrent Protection	
	Overtemperature Protection	
	Working Temperature	-30℃ ~ +50℃
	Working Humidity	20-90%RH (no condensation)
Environment Condition	Storage Temperature/Humidity	-50°C ~ 85°C (six months under class I environment); 10-95%RH (no condensation)
Condition	Atmospheric Pressure	86KPa-106KPa
	Vibration	Displacement amplitude: 5Hz ~ 9Hz 1.2mm; acceleration amplitude: 9Hz ~ 200Hz 1G; sweep-frequency: 1.0oct/min; test time: XYZ, 30 min each; The driver was in operating state and was tested according to system setting.
	Certificate	UL, FCC
	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: 2.0KV) , Class B
	Electrical Fast Transient / Burst	2.0KV (Class B)
Safety &	Ringing wave	2.5KV (Class B)
Norm	Safety Standard	UL8750, AS/NZS 61347-1: 2016
	Electromagnetic Interference	FCC Part 15B
	Electromagnetic Susce ptibility	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

	IP Rating	1						
	RoHS	RoHS 2.0 (EU) 2015 / 863						
Others	Warranty Condition	5 years (43,800 hours) @Tc 71 °C						
	MTBF							
	Noise Rating	≤20db (Tested in a soundproof room and the noise collector was 10cm away from 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.							



Additional Remark

- 1. It is recommended that customer should install protection devices for surge and for overvoltage & undervoltage to ensure safety before connecting to electricity.
- 2. The PC cover, housing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard 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

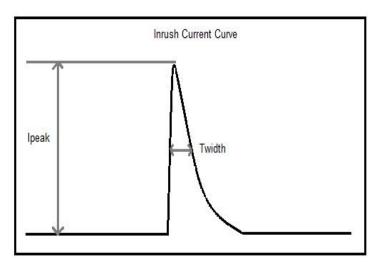
MTBF: Mean time between failure

Circuit Breaker & Relevant Parameters

Name	Value	Remark
Surge peak current (Ipeak)	42A	Input voltage 230Vac
Surge half-peak time (Twidth)	3.8µs	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)	

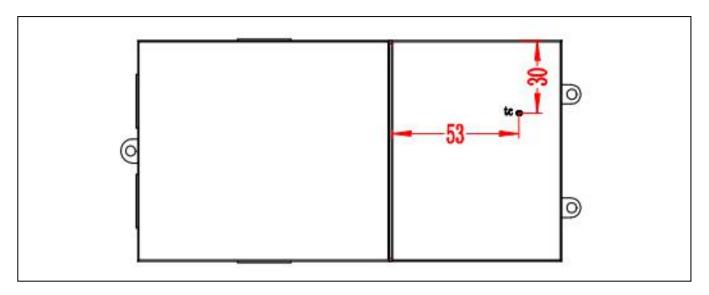
Driver quantities are below if use another type of circuit breaker.

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

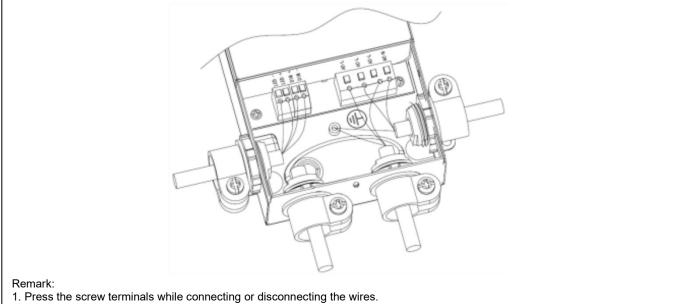


Label





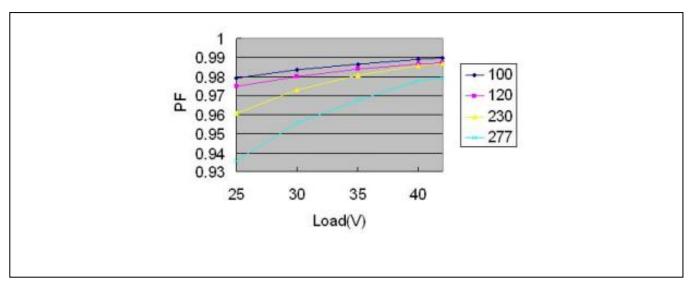
Wiring Diagram



- 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.

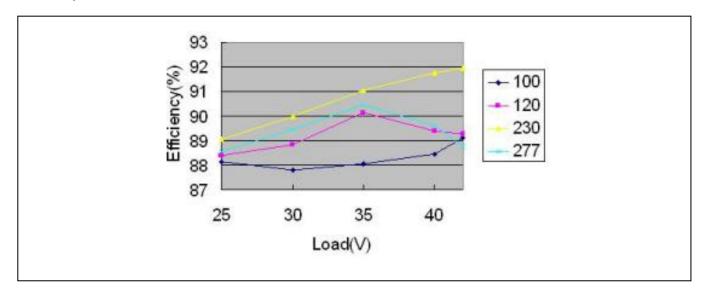
Product Feature Curve

1. PF curve

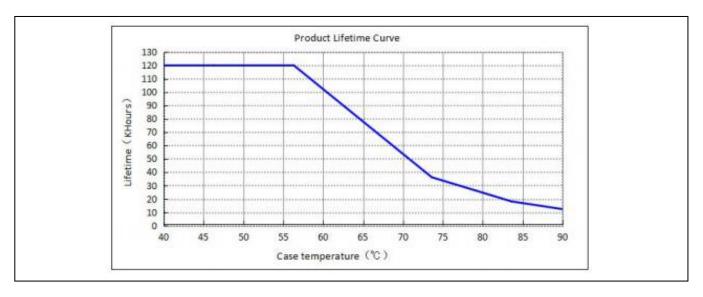




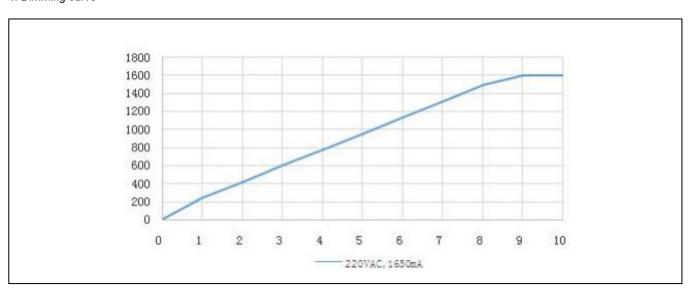
2. Efficiency curve



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	110	247	425	596	768	943	1124	1298	1487	1613	1613

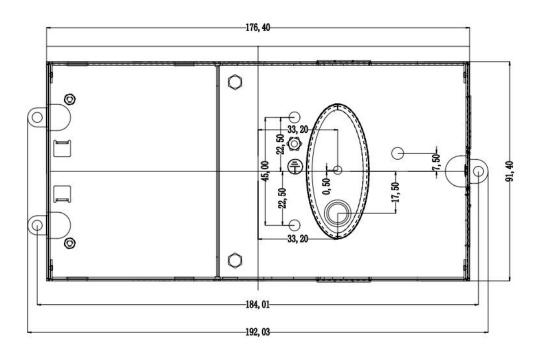
PWM dimming

PWM signal	0-5%	8%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Output current	OFF	115	253	438	610	786	961	1136	1304	1418	1612	1612

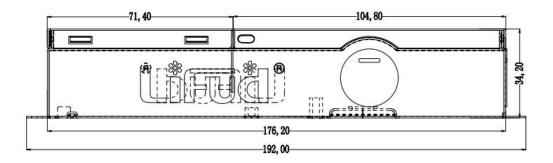
Rx dimming

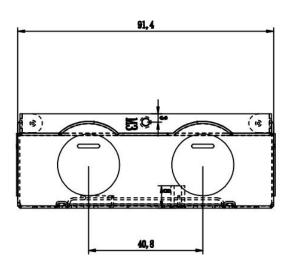
Dimming resistance	0ΚΩ	5ΚΩ	10ΚΩ	20 ΚΩ	30 ΚΩ	40 ΚΩ	50 ΚΩ	60 ΚΩ	70 ΚΩ	80 ΚΩ	90 ΚΩ	100 ΚΩ
Output current	OFF	100	261	434	615	790	961	1114	1271	1392	1544	1610

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









Packaging Specification

Carton dimension	420*300*215mm (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.