深圳莱福德科技股份有限公司
LIFUD TECHNOLOGY CO., LTD.

1. Product Description

Isolated LED Driver for Class I LED Luminaire

Category: AC100-277V, dimmable, flicker-free

Property: 0-10V/PWM/Rx dim, active PFC, high PF, high efficiency, low THD

Application: indoor office lighting, decorative lighting, commercial lighting & residential lighting. It's specially designed for tri-proof light.

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

Certificate: UL, FCC

c US E338140

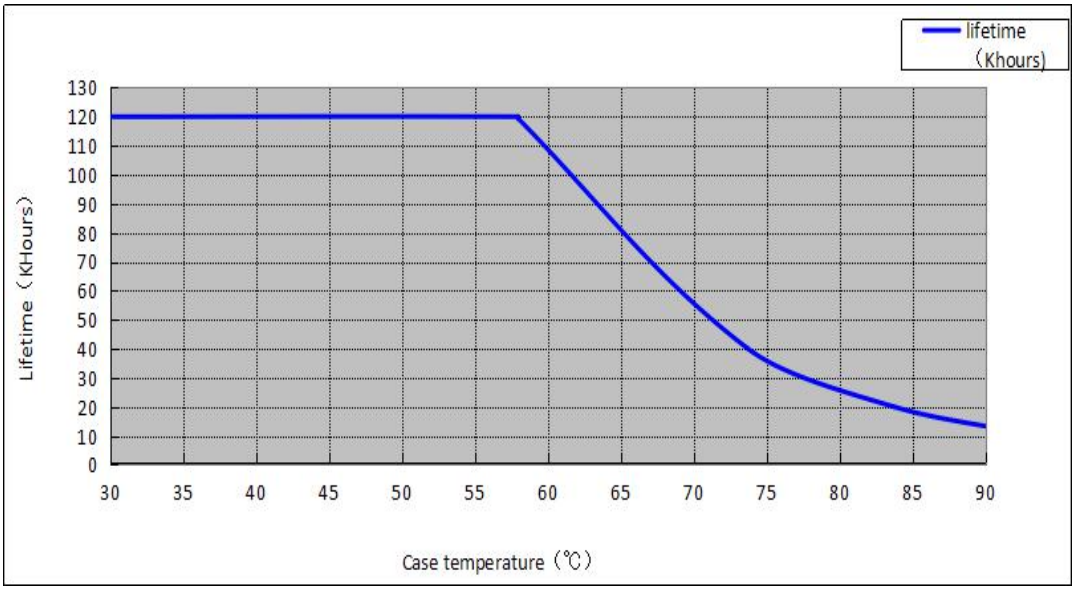
2. Technical Data

	Full Model Number	LF-GLD065YS 1300U	LF-GLD065YS 1350U	LF-GLD065YS 1400U	LF-GLD065YS 1450U	LF-GLD065YS 1500U	LF-GLD065YS 1550U
Output	Output Voltage	25-42Vdc					
	Output Current	1300mA	1350mA	1400mA	1450mA	1500mA	1550mA
	Ripple Voltage	< 1V					
	Current Tolerance	±5%					
	Start-up Time	100Vac<1S, 230Vac <0.5S, 277Vac <0.5S					
	Temperature Drift	±10%					
	Line Regulation	±5%					
Input	Line Regulation	±5%					
	Rated Input Voltage	100-277Vac (Voltage Limit: 90-305Vac)					
	Frequency	47Hz-63Hz					
	Input Current	0.90A Max					
	Power Factor	≥0.98/120Vac	≥0.98/120Vac	≥0.98/120Vac	≥0.98/120Vac	≥0.98/120Vac	≥0.98/120Vac
		≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Vac	≥0.95/230Va	≥0.95/230Va
		≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac
	THD	≤20%					
	Efficiency	≥86%/120Vac	≥86%/120Vac	≥86%/120Vac	≥86%/120Vac	≥86%/120Vac	≥86%/120Vac
		≥88%/230Vac	≥88%/230Vac	≥88%/230Vac	≥88%/230Vac	≥88%/230Vac	≥88%/230Vac
		≥87%/277Vac	≥87%/277Vac	≥87%/277Vac	≥87%/277Vac	≥87%/277Vac	≥87%/277Vac
	In-Rush Current	I<80A/350uS@230Vac					
	Stand-by Power	≤1.0W @120Vac, @230Vac or @ 277Vac					
Protective Feature	Open Circuit	Open circuit voltage ≤ 55Vdc					
	Short Circuit	Hiccup mode (auto-recovery)					
Environment Condition	Working	-30℃ ~ +50℃					
	Working Humidity	20-90%RH (no condensation)					
	Storage Temperature/Humidit	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)					
	Atmospheric Pressure	86-106KPa					
Safety & Norm	Certificate	UL, FCC					
	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 Rating	Comply with IEC61000-4-5 (L-N:1KV, L/N-PG:2KV)					
	EMI	FCC Part 15 Class B					
	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: 243g±5%/pc; 9.53KG±5%/ctn; 36pcs/ctn					
	IP Rating	\					
	Warranty	5 years (Max. case temperature must not exceed 70℃)					

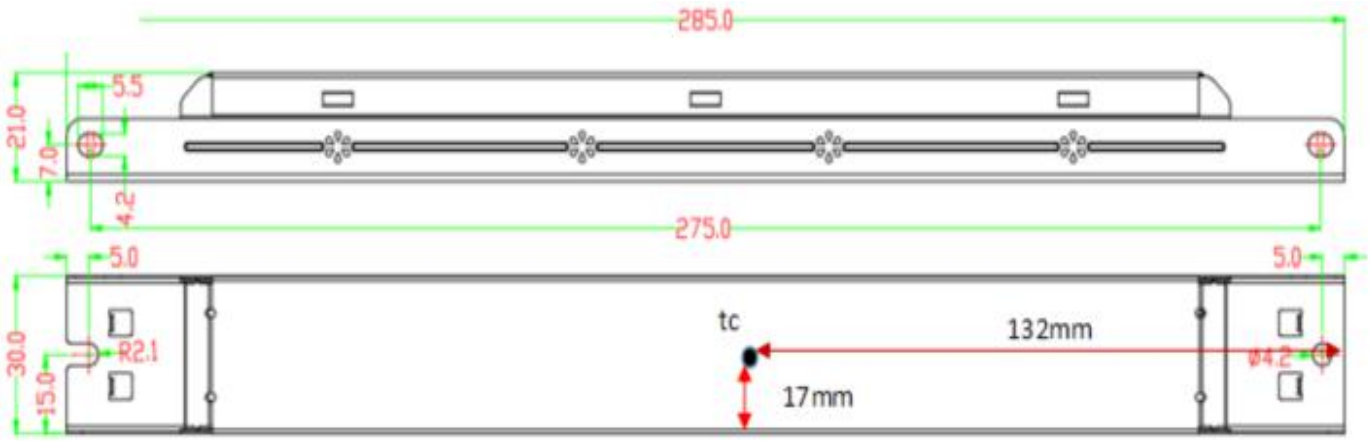
Testing Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, stroboscope (flicker index 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℃ and humidity 50%, input 120Vac, 230Vac, 277Vac and 90% load.
Additional Remark	1. It is recommended that customer should install an over & under voltage protection and surge protection device to ensure safety before connecting to electricity. 2. The PC cover, housing, end caps and other parts of the LED driver inside the LED luminaire must conform to UL94 V-0 flammability standard 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 wiring of the light fixture are also relevant. Thus it's strongly recommended the LED luminaire manufacturer should re-confirm the EMC of the whole LED luminaire.

3. Product Lifetime Curve

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

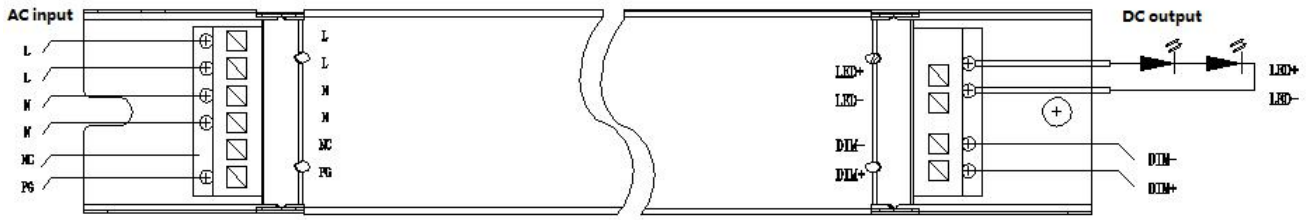


4. Dimensional Drawing with Tc Point (Unit: mm; Tolerance: +0.5mm): 285*30*21mm



Model	LF-GLD065YS	**Series**	Dimmable & Flicker-free Series for Tri-proof Light

5. Wiring Diagram:



6. Dimming

Three dimming modes in one driver. The test data below are for your reference only.

1) 0-10V dim: dimming range 0%~100%. (Tested with LIFUD 0-10V dimmer.)

Dimming Voltage	0-0.3V	0.5V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of Rated Current	OFF	ON	19%	29%	41%	53%	63%	75%	86%	97%	99%	99%	95%-105%

2) PWM dim: dimming range 0%~100%. Voltage amplitude: 10V. The frequency of PWM signal is 300Hz~3KHz. (Tested with PWM signal generator: RIGOL.)

PWM Signal	0-6%	7%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of Rated Current	OFF	ON	19%	32%	43%	54%	65%	75%	89%	97%	99%	99%	95%-105%

3) Resistance dim: dimming range 0%~100%. Resistance range: 10kΩ~100kΩ. (Tested with LEVITON dimmer.)

Rx Range	0-5K	6K	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K	OPEN
Percentage of Rated Current	OFF	ON	17%	30%	41%	54%	67%	78%	89%	98%	99%	99%	95%-105%

Remark: The “Iout percentage” above are typical values.