

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, 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



2. Technical Data

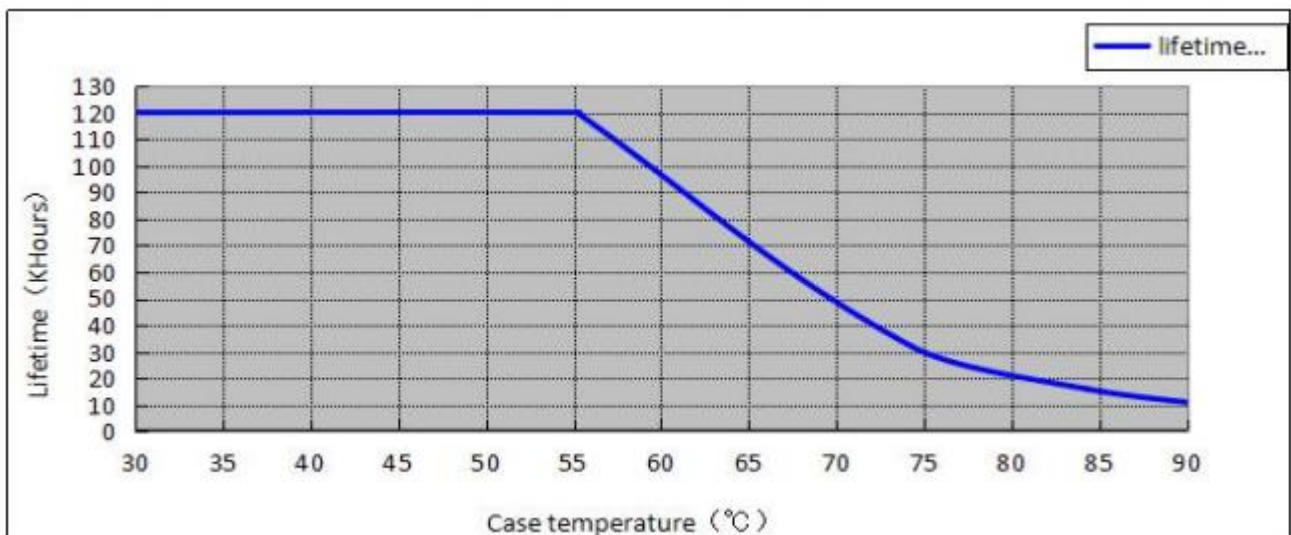
	Full Model Number	LF-GLD045YS 0800U	LF-GLD045YS 0850U	LF-GLD045YS 0900U	LF-GLD045YS 0950U	LF-GLD045YS 1000U	LF-GLD045YS 1050U	LF-GLD045YS 1100U
Output	Output Voltage	25-42Vdc						
	Output Current	800mA	850mA	900mA	950mA	1000mA	1050mA	1100mA
	Ripple Voltage	< 1V						
	Current Tolerance	±5%						
	Start-up Time	100Vac<1S, 230Vac <0.5S, 277Vac <0.5S						
	Temperature Drift	±10%						
	Line Regulation	±5%						
Input	Line Regulation	±5%						
	Rated Input Voltage	90-305Vac (rated voltage: 100-277Vac)						
	Frequency	47Hz-63Hz						
	Input Current	0.65A Max						
	Power Factor	≥0.98/120Vac	≥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	≥0.95/230Vac
		≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac	≥0.9/277Vac
	THD	≤20%						
	Efficiency	≥85%/120Vac	≥85%/120Vac	≥85%/120Vac	≥85%/120Vac	≥85%/120Vac	≥85%/120Vac	≥85%/120Vac
		≥86%/230Vac	≥86%/230Vac	≥86%/230Vac	≥86%/230Vac	≥86%/230Vac	≥86%/230Vac	≥86%/230Vac
		≥85%/277Vac	≥85%/277Vac	≥85%/277Vac	≥85%/277Vac	≥85%/277Vac	≥85%/277Vac	≥85%/277Vac
Protective Feature	In-Rush Current	I<80A/350uS@230Vac						
	Stand-by Power	≤1.0W @120Vac, @230Vac or @ 277Vac						
Protective Feature	Open Circuit Protection	Open circuit voltage ≤ 55Vdc						
	Short Circuit Protection	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 & Norm	Certificate	UL, FCC						
	Hi-Pot Test	I/P-O/P:3.75KVac&5mA&60S ; I/P-PG:1.6KVac&5mA&60S ; O/P-PG:0.5KVac&5mA&60S						
	Insulation Resistance	I/P-O/P,I/P-PG,O/P-PG:> 100MΩ@500VDC						
	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: 385*285*210mm(L*W*H); Net weight: 181g±5%/pc; 10.91KG±5%/ctn; 56pcs/ctn						
	IP Rating	\						
	Warranty	5 years (Tc≤70℃)						

Model	LF-GLD045YS	Series	Dimmable & Flicker-free Series for Tri-proof Light
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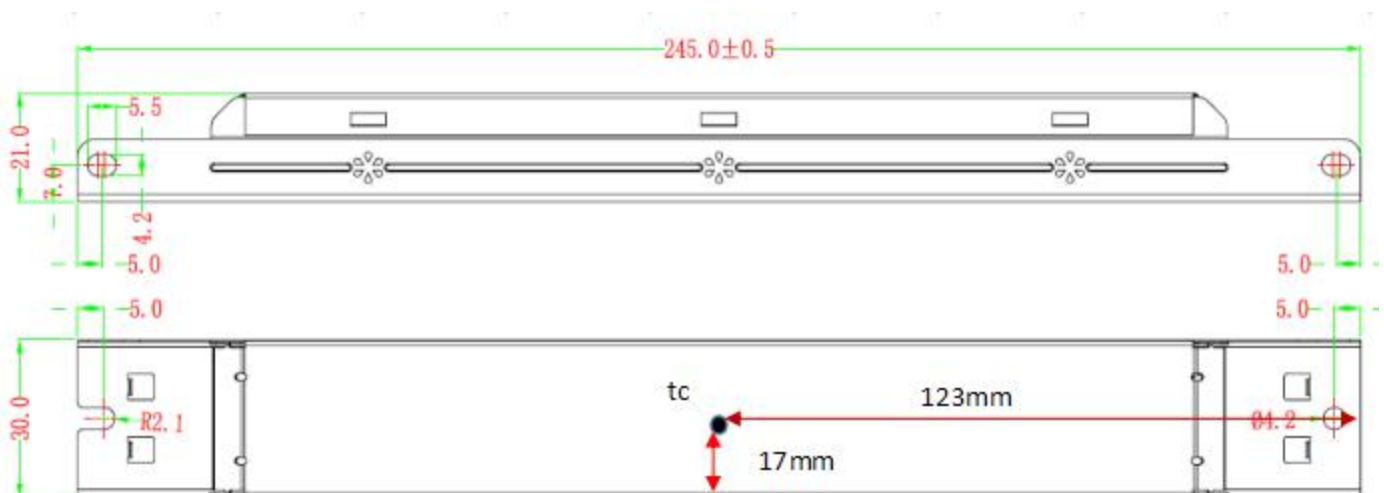
Testing Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, 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°C 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°C, 50°C, 60°C, 70°C and 80°C.

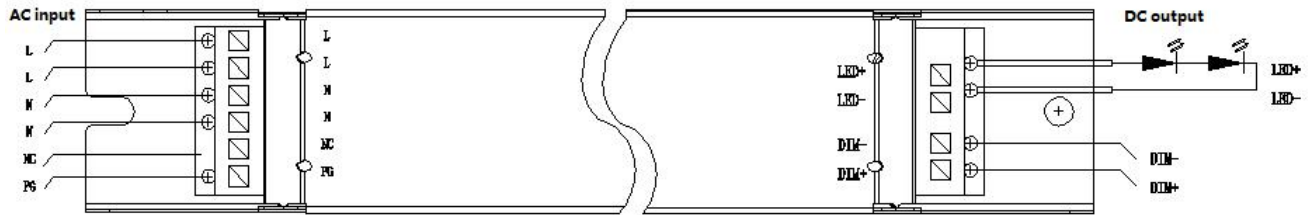


4. Dimensional Drawing with Tc Point (Unit: mm; Tolerance: +0.5mm): 245*30*21mm



Model	LF-GLD045YS	Series	Dimmable & Flicker-free Series for Tri-proof Light
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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	12%	23%	34%	46%	57%	68%	79%	91%	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	13%	26%	37%	48%	58%	69%	80%	92%	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	13%	24%	35%	46%	58%	69%	80%	91%	99%	99%	95%-105%

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