

Product Description

LF-GOE250YV024A is a 250W constant voltage LED power supply, specifically designed for outdoor lighting, flood light and landscape lighting. Rated input voltage: 100-277VAC (limit: 90-305V). Super high efficiency and excellent heat-dissipation properties of this product help to extend the product lifetime. It also has ultra high power factor and extremely low THD.

All-round protections including surge protection, over voltage protection, short circuit protection and over temperature protection greatly improve the product stability.

The output voltage can be conveniently adjusted via the potentiometer at the bottom of the driver so as to meet diverse demands.

Feature

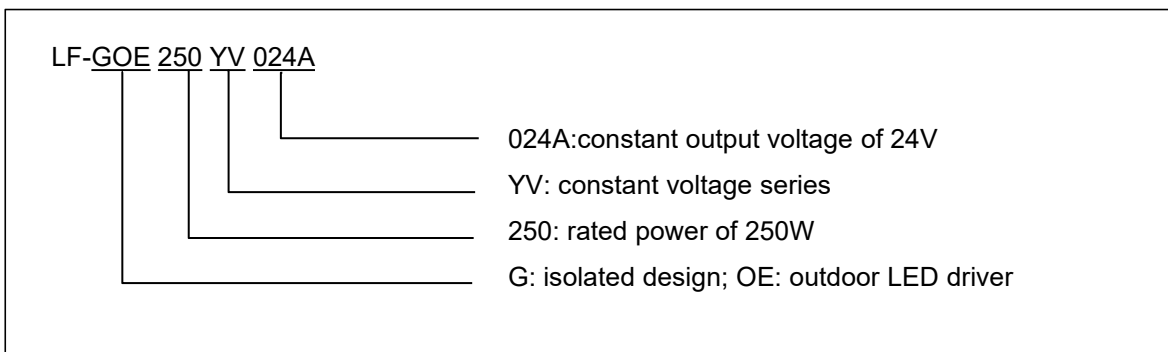
- Efficiency up to 93%
- Input voltage range: 100-277VAC; THD <15%
- The output voltage can be conveniently adjusted via the potentiometer, simplifying the inventory management
- Surge protection: L-N: 6KV; L/N-GND 8KV
- All-round protections: over voltage protection, short circuit protection, over temperature protection and IP67
- Flicker free; percent flicker ≤0.5%
- 5yrs warranty (please refer to the warranty condition.)

Application

- Outdoor lighting
- Flood light
- Landscape Lighting



Product Naming



Electrical Characteristics

Full Model Number		LF-GOE250YV024A
Output	Output Voltage	22.08-25.92Vdc (Adjusted via the potentiometer)
	Output Current	10.42A max.@200-277Vac; 8.34A max.@100-277Vac
	Output Power	250W max.@200-277Vac; 200W max.@100-277Vac
	Default Setting	24Vdc
	Percent Flicker (Modulation Depth)	≤0.5% @ 50Hz or 60Hz
	Ripple Voltage	≤10% @ 50Hz
	Voltage Tolerance	±2.5%
	Temperature Drift	±10% / 25-60℃
	Start-up Time	<1S @ 120VAC; <0.5S @ 230VAC
Input	Rated Input Voltage	100-277Vac (limit: 90-305Vac)
	DC Input Voltage	141-391Vdc (limit: 127-431Vdc)
	Input Frequency Range	47-63Hz
	Input Current	2.65A Maximum
	Power Factor	≥0.97/100VAC @full load; ≥0.95/230VAC @full load; ≥0.90/277VAC @full load
	THD	≤15%
	Efficiency	≥88%/100VAC @full load; ≥92%/230VAC @full load; ≥93%/277VAC @full load
	Inrush Current	≤80A & 500uS
	Leakage Current	≤0.7mA
	Standby Power Consumption	≤1.5W
Protection Features	Surge Protection	L-N: 6KV; L/N-GND: 8KV
	Short-Circuit	Hiccup mode (auto-recovery)
	Over Voltage	≤35V (disconnect output voltage; auto-recovery)
	Over Current	≤150% (auto-recovery)
Environment Condition	Working Temperature	-40℃ ~ +60℃
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature/Humidity	-40℃ ~ +80℃ (six months under class I environment); 10-90%RH (no condensation)
	Atmospheric Pressure	86KPa-106KPa

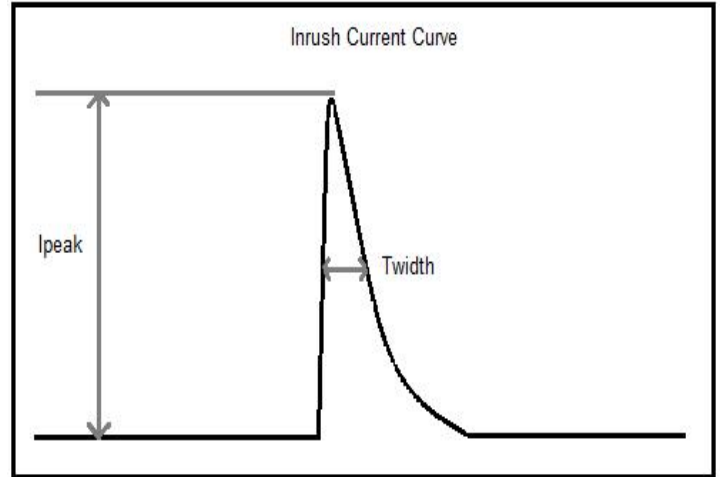
Safety & Norm	Certificate	TUV-ENEC, CCC, CE, RCM, UL(Class P), CCC, SAA, CB
	Withstand Voltage	I/P-O/P: 3.75KV, 5mA, 60s; I/P-FG: 1.5kV 5mA 60S; O/P-FG: 0.5kV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ@500VDC
	Safety Standard	ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384: 2016/A1:2009 CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 CB: IEC 61347-1:2015, IE61347-2-3:2014, IEC 61347-2-13:2014/AMD1:2016 RCM: AS 61347.2-13:2018 CCC: GB19510.1-2009, GB19510.14-2009 UL: UL8750, CSA 250.13
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2 FCC: PART 15B
	EMS	CE-EMC/RCM: EN61000-4-2,3,4,5,6,11 CCC: GB/T17626.2,3,4,5,6,11
	EFTB	2.2KV (Class B)
	Ring wave	2.5KV (Class B)
	Electrostatic Discharge (ESD)	Air 8KV; touch 4KV (Class B)
	Others	IP Rating
RoHS		RoHS 2.0 (EU) 2015 / 863
Warranty Condition		5 years (Tc≤71 °C)
Noise Rating		≤20db (Tested in a soundproof room and the noise collector was 10cm away from the driver.)
Additional Remark	<ol style="list-style-type: none"> 1. It is recommended that customer should install protection devices for surge, for over voltage and for undervoltage to ensure safety before connecting to electricity. 2. 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. 3. It's suggested that the user should use a slotted screwdriver or a Philips screwdriver to adjust the output current in case the potentiometer is damaged. The screwdriver with a 2mm slot head is recommended. Torque is NOT higher than 0.5KNM. Make sure the insulation of the screwdriver is good enough. 4. The total output power of the light fixture should NOT exceed the maximum rated output power of the driver. ⚠ 5. Unless otherwise stated, the parameters above are test results under these conditions: ambient temperature of 25°C, humidity of 50%, 100% load and input voltage of 230Vac. 	

Circuit Breaker & Relevant Parameters

Name	Value	Remark
Surge peak current (Ipeak)	77.6A	Input voltage of 230Vac
Surge half-peak time (Twidth)	204μs	Input voltage of 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.	9 pcs (max.)	

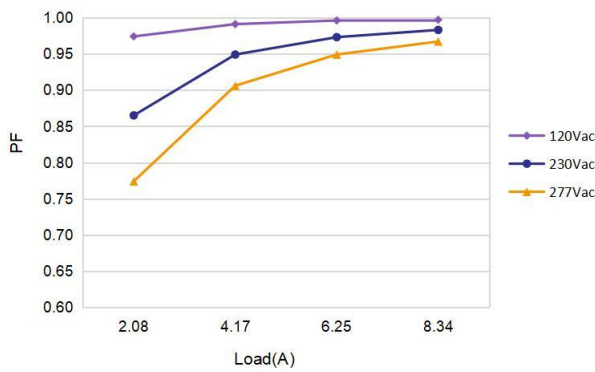
Driver quantities are below if use another type of circuit breaker.

Type	Rank	Qty of accommodated drivers	Relative conversion ratio
B	10A	5 pcs	63%
	13A	7 pcs	81%
	16A	9 pcs	100% (benchmark)
	20A	11 pcs	125%
	25A	14 pcs	156%
C	10A	9 pcs	104%
	13A	12 pcs	135%
	16A	15 pcs	170%
	20A	18 pcs	208%
	25A	23 pcs	260%

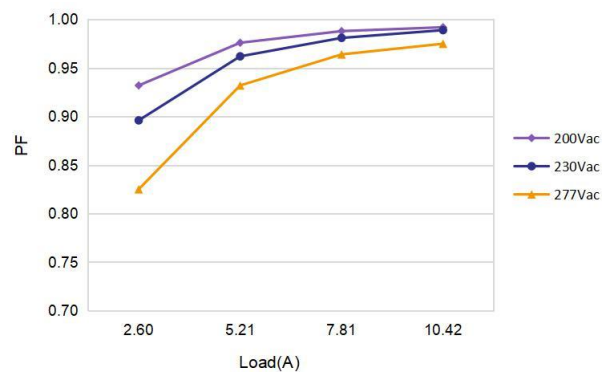


Product Characteristic Curves

■ PF Curve

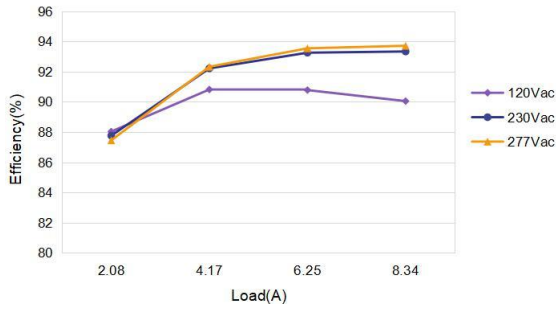


24V 8.34A max@100-277Vac

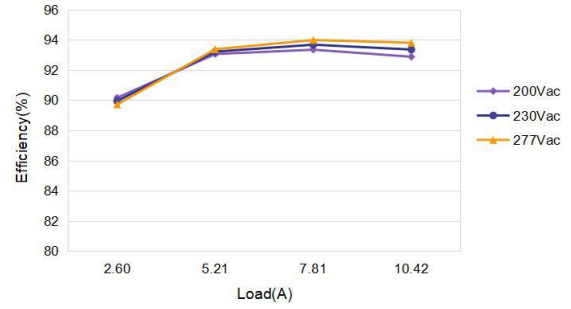


24V 10.42A max@200-277Vac

■ Efficiency Curve

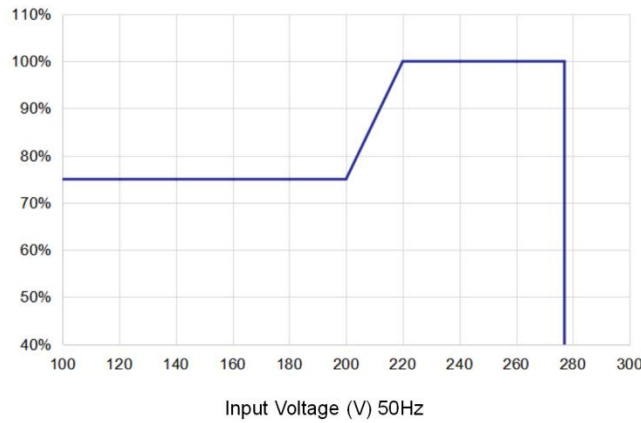


24V 8.34A max@100-277Vac

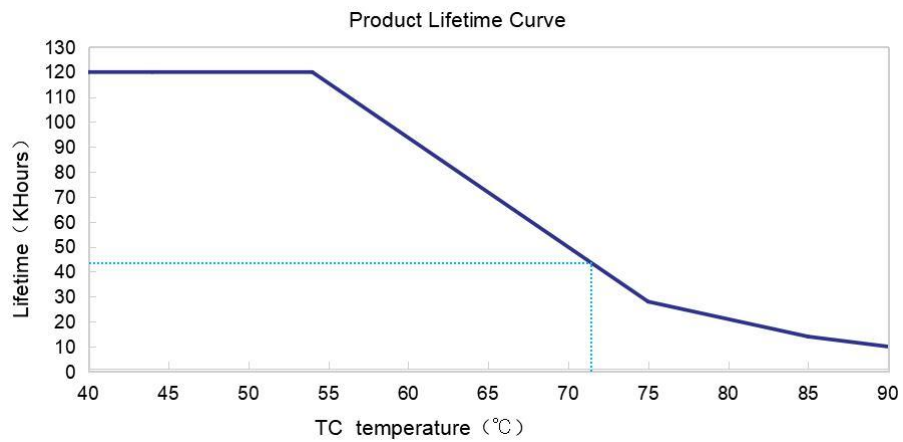


24V 10.42A max@200-277Vac

■ Derating Curve



■ Lifetime Curve

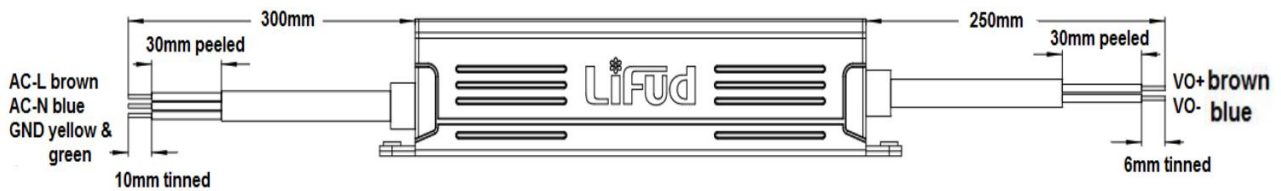


Dimming Operation

■ Built-in potentiometer dimming (changing constant voltage)

Feature	Min	Rated	Max	Remark
The output range of the built-in potentiometer dimming	22VDC	-	26VDC	The total output power of the light fixture should NOT exceed 250W/200W otherwise LIFUD will NOT provide quality assurance. (Vout * Iout = Pout)

Wiring Diagram

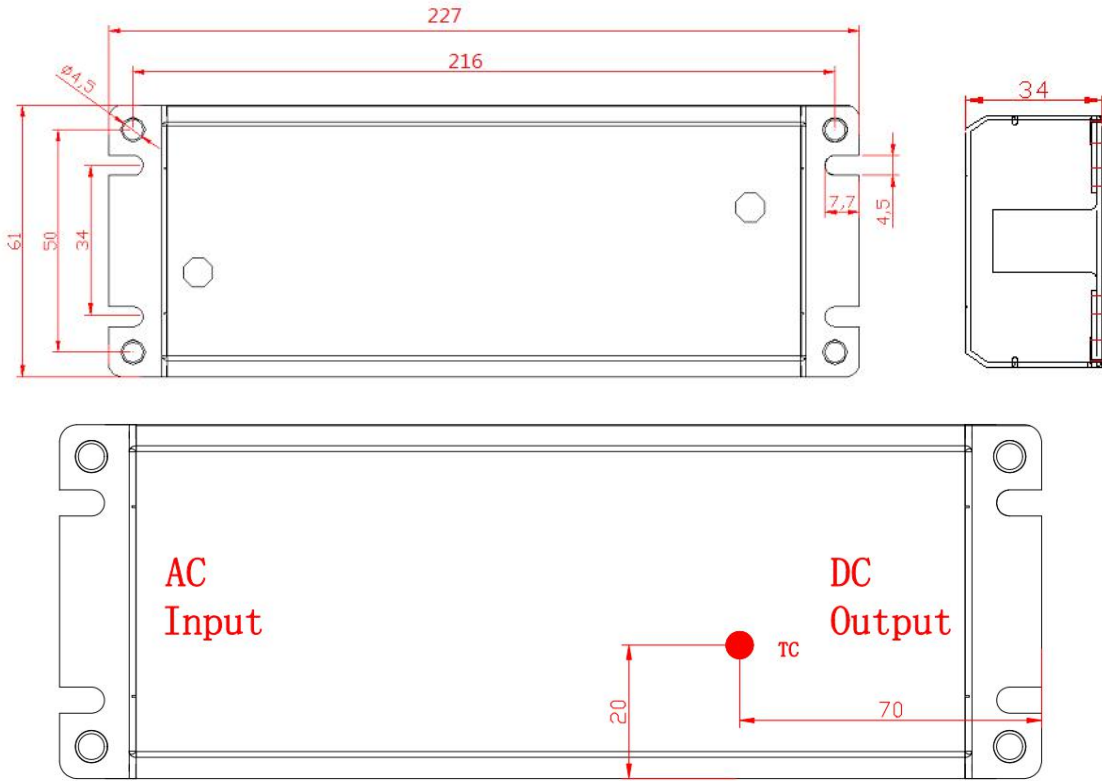


Cable specification: input 3*17AWG/3*1.04mm² (SJOW, H05RN-F) ØD8.2±1mm
 output 2*17AWG/2*1.04mm² (SJOW, H05RN-F) ØD7.7±1mm

Label

<p>www.lifud.com</p> <p>INPUT</p> <ul style="list-style-type: none"> ■ AC-L (BROWN) ■ AC-N (BLUE) ■ PG (YELLOW/GREEN) 	<p>LED Driver Model: LF-GOE250YV024A</p> <p>EU/AU: Input: 220-240V ~ 50/60Hz, Max. 1.6A U rated: +24V(CV) --- I rated: 10.42A, P rated: 250W</p> <p>North America: Input 100-220V ~ 50/60Hz, Max. 2.65A U rated: +24V(CV) --- I rated: 8.34A, P rated: 200W 277V ~ I rated: 10.42A, P rated: 250W</p> <p>Constant Voltage Output Type PF: ≥0.95 Suitable for Wet Locations ta: 60°C For LED modules only Made in China tc: 90°C</p>		<p>OUTPUT</p> <p>(BROWN) VO+ ■</p> <p>(BLUE) VO- ■</p>
	<p>For Connections Use Wire Rated for at Least 90°C (194°F)</p>		<p>S/N</p>

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



Tc Spot (on the top of the housing)

Packaging Specification

Mode	LF-GOE250YV024A
Carton Size	420*300*210mm (L*W*H)
Quantity	4 pcs/layer; 4 layers/ctn; 16 pcs/ctn
Weight	0.92Kg±5%/pc; 15.5Kg±5%/ctn

Transportation & Storage

■ Transportation

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

■ Storage

- Storage in accordance with the provisions of Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

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

Change Resume

Version	Content of Change	Date	Remark
V1.0	Initial version	11 OCT 2019	
V1.1	Changed the product picture	28 OCT 2020	
V1.2	1. Changed the product picture; 2. Adjusted the format; 3. Updated the Characteristic Curves	14 NOV 2020	