



## 1. Product Introduction



# 24VDC 250W

### Product Features

- Conversion efficiency: up to 93%
- Input voltage: 100-277Vac, THD<15%
- Output voltage adjustable via a potentiometer; It helps to simplify your inventory management
- Surge protection: L-N: 6KV; L/N-GND: 8KV
- All-round protection: over temperature protection, over voltage protection, short circuit protection & IP67
- Flicker free output, percent flicker  $\leq 0.5\%$

**Application:** outdoor lighting, flood light, lighting project

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

**Certificate:** CE, CB, ENEC, SAA, RCM, UL, FCC

### Product Description

LF-GOE250YV024A series is a 250W LED power supply with a built-in potentiometer. Rated input voltage 100-277VAC. Input voltage limit 90-305VAC. This product was specifically designed for outdoor lighting, high bay light, flood light, lighting project.

Super high efficiency and excellent heat-dissipation properties of GOE help to extend the product lifetime. The high-power-factor GOE makes better use of the power grid. Its low harmonic interference means low interference with the power grid and the electric devices in the circuit. All-round protection design improves the product stability which helps to save users' maintenance cost.

The potentiometer at the bottom helps to adjust the output voltage/power of the product, satisfying customers' various demands.

## 2. Technical Data



Full Model Number		LF-GOE250YV024A
Output	Output Voltage	24VDC
	Output Current	10.42A maximum @220-277VAC / 8.34A maximum @100-277VAC
	Rated Power	220-277VAC @250W
		100-277VAC @200W
	Ripple Noise	<1V
	Current Tolerance	±2.5%
	Start-up Time	< 0.5s @230VAC
	Temperature Drift	±10%
Load Regulation	±1%	
Input	Input Line Regulation	±1%
	Input Voltage	100-277Vac (limit voltage: 90-305Vac)
	Input Frequency	47Hz-63Hz
	Input Current	2.65A maximum
	Power Factor	≥0.97/100VAC @full load
		≥0.95/230VAC @full load
		≥0.90/277VAC @full load
	Total Harmonic Distortion	≤15% @full load
	Efficiency	≥89%/100VAC @full load
		≥92%/230VAC @full load
≥93%/277VAC @full load		
Inrush Current	<80A/500uS@230Vac	
Stand-by Power Consumption	≤1.5W @230VAC	
Protective Feature	Overvoltage Protection	≤35V (cut off the output voltage, restart and recover)
	Overcurrent Protection	≤150% (restart and recover)
	Short Circuit Protection	Hiccup mode (restart and recover)
Environment Condition	Working Temperature	-40°C - +60°C
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature / Humidity	-40°C - +80°C (six months under class I environment); 10-90%RH (no condensation)
	Atmospheric Pressure	86-106KPa
Safety & Norm	Certificate	CE, CB, ENEC, SAA, RCM, UL, FCC
	Withstanding Voltage	I/P-O/P: 3.75KVAC, <5mA 60s; I/P-FG: 1.5KVAC, <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	Conform to IEC61000-4-5 (L-N:6KV, L/N-PG:8KV)

	Electromagnetic Interference	Conform to GB17743 / EN55015, EN61000-3-2, CLASS B, FCC Part15
	Electromagnetic Susceptibility	Conform to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547
<b>Others</b>	Packing (Weight)	Carton size: 420*300*210 (L*W*H); Weight: 0.92Kg ±5%/pc; 15.5Kg ±5%/ctn; Quantity: 16 pcs/ctn
	IP Rating	IP67
	Warranty Condition	5 years (TC≤72℃)
<b>Testing Equipment</b>	AC power source: CHROMA6530, Digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED strip light, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectrum analyzer: KH3935, hi-pot tester: TH9201B, stroboscope (flicker index tester) 60N-01, etc.	
<b>Testing Condition</b>	Unless otherwise stated, the electrical parameters above, including the power factor, THD and efficiency, are tested under the ambient temperature 25℃ and humidity 50%, input 230Vac and 100% load.	
<b>Additional Remark</b>	<ol style="list-style-type: none"> <li>1. It is recommended that customer should install protection devices for surge, for overvoltage and for undervoltage to ensure safety before connecting to electricity.</li> <li>2. The PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94 V-0 flammability standard or above.</li> <li>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 light fixture manufacturer re-confirms the EMC of the whole LED light fixture.</li> </ol>	

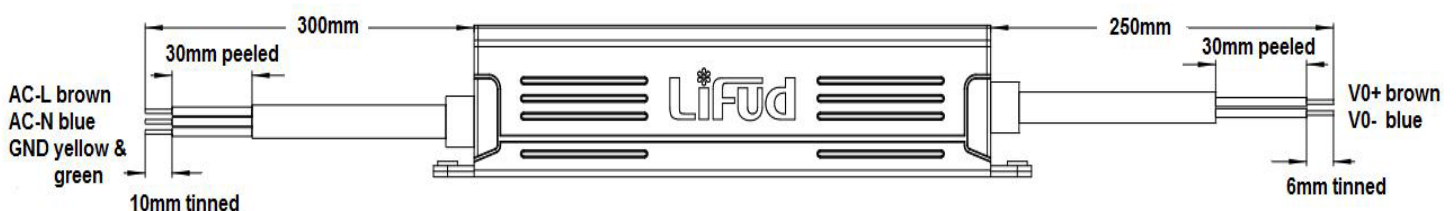
### 3. Dimming Features

Dim via a built-in potentiometer (adjust the output voltage)

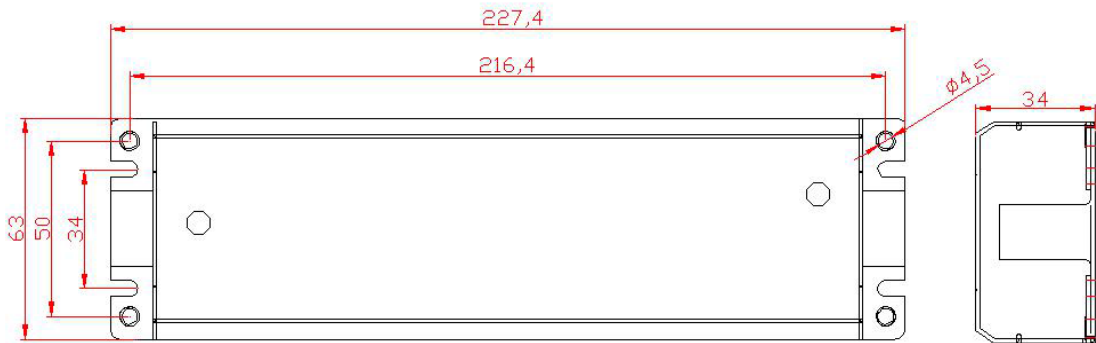
Feature	Minimum	Rated	Maximum	Remark
Output range of dimming	22VDC	-	26VDC	The total output power of the light fixture should NOT exceed 250W otherwise LIFUD will NOT provide quality assurance. ( $V_{out} * I_{out} = P_{out}$ )

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 no higher than 0.5KNM. Make sure the insulation of the screwdriver is good enough.

### 4. Dimensional Drawing (Unit: mm ± 20mm)

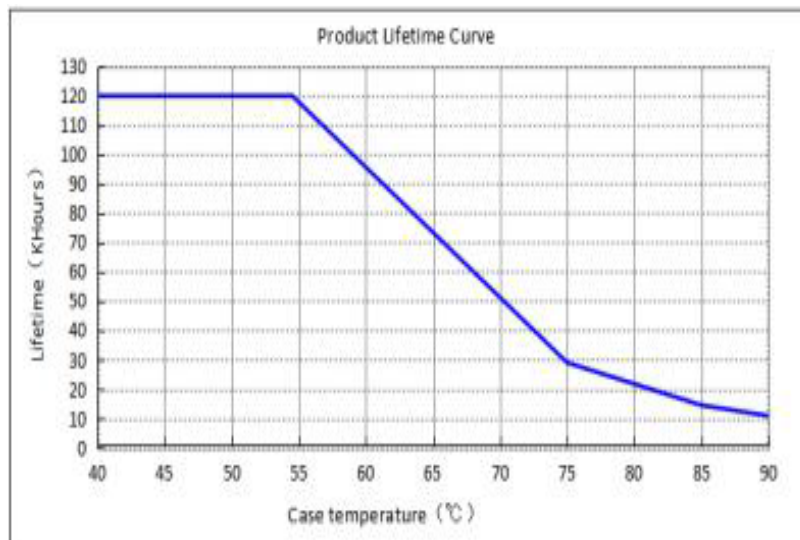


Cable specification: input 3\*17AWG/3\*1.04mm<sup>2</sup> (SJOW, H05RN-F) ØD8±1mm  
output 2\*17AWG/2\*1.04mm<sup>2</sup> (SJOW, H05RN-F) ØD8±1mm

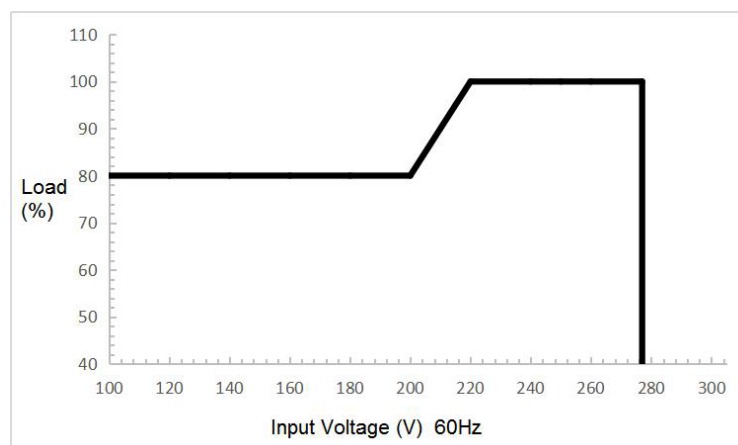


## 5. Product Lifetime Curve

The curve below illustrates the driver's lifetime data when the casing temperature in an airtight space reaches 40°C, 50°C, 60°C, 70°C and 80°C.



## 6. Load Derating Curve



Remark: The output derating happens when the input voltage is low.