

92724

# Flicker Free LED Power Supply 48W 1200mA

## 1. Product description



**Isolated LED driver for class I, class II LED luminaire.**

**Category:** AC220-240V, plastic case, flicker free

**Properties:** active PFC, high PF, high efficiency, low THD

**Application:** indoor office lighting, decorative lighting, commercial lighting and residential lighting

**Warranty:** 2 years + 3 years extended warranty

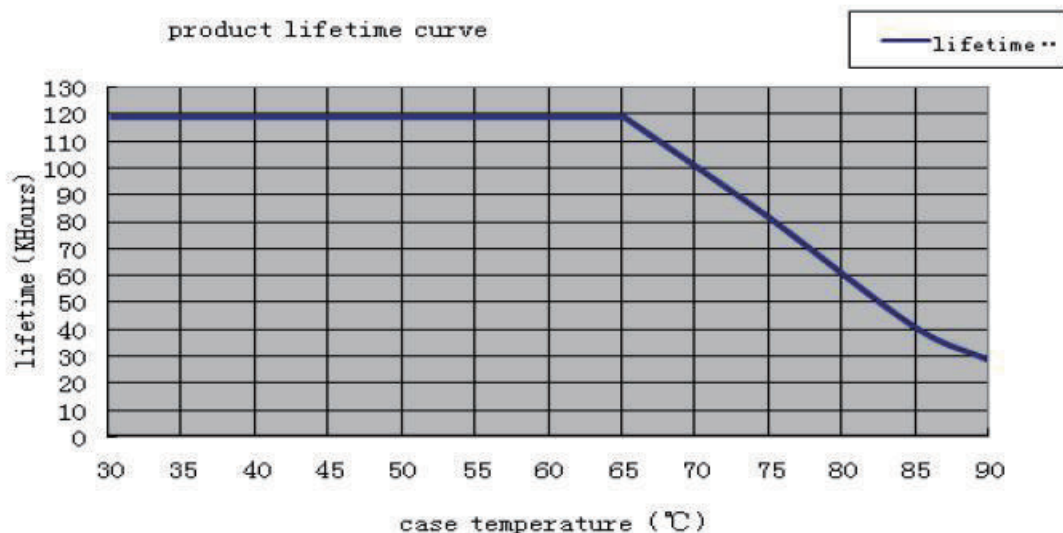
## 2. Technical data

Output	Output voltage	33-40Vdc
	Output current	1200mA
	Ripple voltage	≤ 2V
	Current tolerance	±5%
	Time to light	≤ 0.5S/230Vac
	Temperature drift	±10%
	Line regulation	±5%
	Flicker coefficient	≤ 0.5%
Input	Line regulation	±5%
	Rated input voltage	220-240 Vac (Max input voltage:200-264Vac)
	Frequency	47Hz-63Hz
	Input current	0.4A Max
	Power Factor	≥0.95/230Vac
	THD	≤20%
	Efficiency	≥90%/230Vac
	In-rush current (peak /duration)	I<60A/350uS@230Vac
	Typ. power input on stand-by	P <sub>in</sub> ≤0.3W
Protective features	No-load	Max. output voltage (no-load voltage) 55Vdc
	Short-circuit	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 and norms	Hi-pot test	I/P-O/P: 3.75KVac, ≤5mA, 60S
	Insulation resistance	I/P-O/P: 500VDC, >100MΩ
	Surge level	Comply with IEC61000-4-5(L/N:1KV)
	EMI	Comply with EN55015, EN61000-3-2.
	EMS	Comply with EN61000-4-2,3,4,5,6,8,11; EN61547.
Others	IP level	IP20
	Warranty condition	Max. case temperature must not exceed 80℃

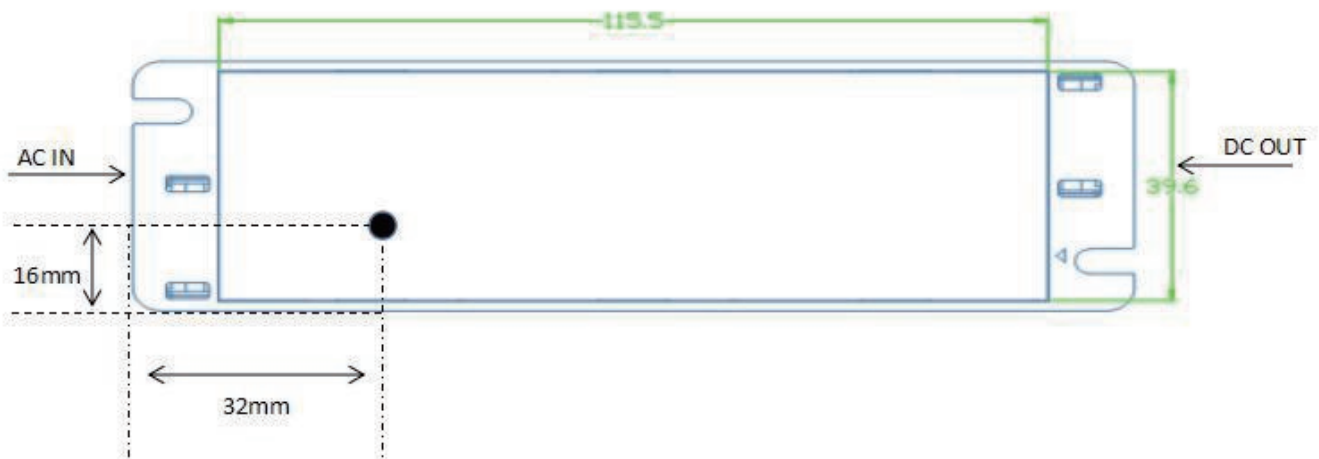
<b>Testing equipment</b>	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: TH9201B, flicker-free tester (flicker-free coefficient tester) 60N-01, etc.
<b>Test conditions</b>	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% DC load.
<b>Additional Remark</b>	<ol style="list-style-type: none"> <li>1. In the power supply circuit, it is recommended that the customer should install an over-under-voltage protection and surge protection device to ensure the safety of using electricity.</li> <li>2. The PC cover, shell, end caps used together with the LED driver inside the LED lamp must meet the UL94V-0 fire rating level or above.</li> <li>3. As a part of the LED lamp, the LED driver is not the only factor determining the EMC performance of the LED lamp. And the EMC performance is also related to the LED lamp's structure and the wire routing. Thus we strongly recommend the manufacturer of the finished LED lamp must re-confirm the EMC of the LED lamps.</li> </ol>

### 3. Product Referenced Lifetime Curve

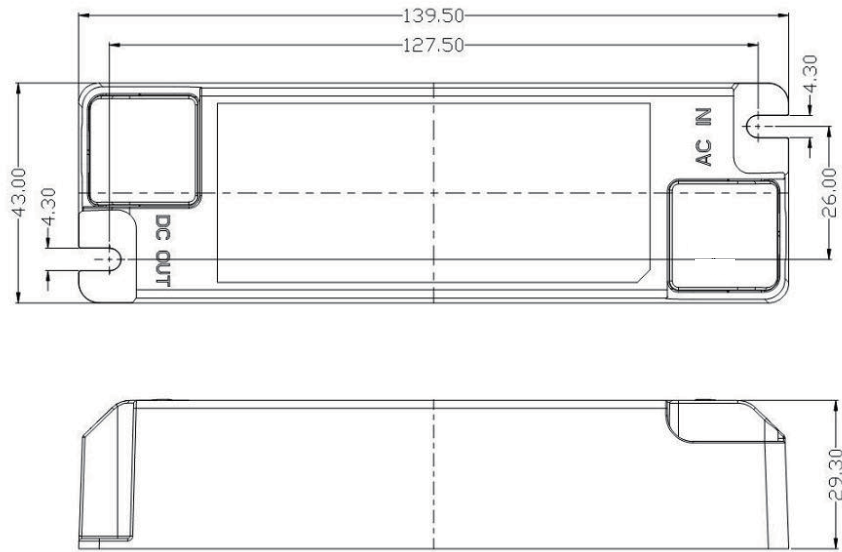
1)The curve below illustrates the driver's lifetime data when the LED driver's Max. case temperature reaches 40°C,50°C, 60°C, 70°C,80°C,85°C and 90°C.



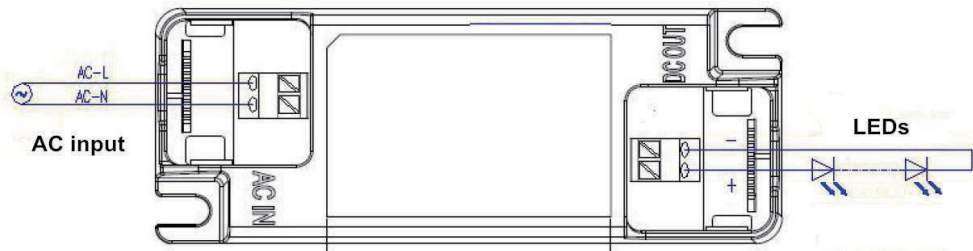
2) Tc Testing point, on the bottom case



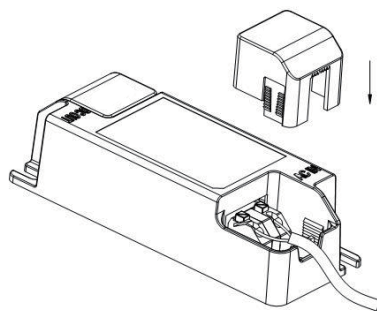
#### 4. Dimensional Drawing (unit: mm)



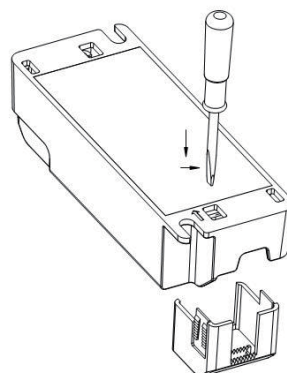
#### 5. Wire Connection Diagram:



#### 6. Assembly Diagram:



Assembly of dust caps



Dis-assembly of dust caps