



25 Watt — LP25W Series Small & Efficient Series

CONSTANT CURRENT LED DRIVER WITH ONE 25 Watt OUTPUT

US & CN LED DRIVER CLASS 2

Part Number: LP25W Series
Product mark: YG
Manufactory: Shenzhen YIGUANG technology co., Ltd
Driving mode: Constant current with safety isolation
Technology: Single-Stage PFC & PSR technology
Output Power: 25 Watt
Input voltages: 100 to 277 VAC (maximum : 90-305 VAC)
Efficiency: Up to 91%
Suitable: For LED lamp driver
Warranty: 5 years



Size	Unit	Inch	Millimeter
Case Length		3.44	87.50
Case Width		1.44	36.50
Case Height		0.94	24.00

Special Features

1. UL8750, UL1310 Class 2, CSA22.2 safety compliant
2. FCC 47CFR PART 15 compliant
3. Meet the RoHs directive, IP65 compliant
4. Suitable for high-temperature, high-dust location
5. Inrush Current Limiting Circuitry: AC line to line 1.5 kV, eliminates circuit breaker tripping, switch arcing and relay failure
6. Single output, ranged from 7Vdc up to 200Vdc
7. Active PFC reduces power consumption
8. Isolation between primary and secondary

Environmental

1. Operating temperature: Tc 90°C (max), Reference Ta -40 to +60°C
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: free air cooling Convection
5. Vibration frequency: 5-55Hz/2g, 30 minutes; impact resistance: 1g/s
6. MTBF @ 75°C (Tc): 560,000 hours @ full load per MIL-217F notice 2
7. LIFE @ 75°C (Tc): 50,000 hours @ full load
8. EMC:
Compliant to CISPR 22 CLASS B, CISPR 14-1 CLASS B, GB4343. 1-2003, GB17625.1-2003
 - a. Continuous interference voltage test conforming to GB4343-2003+A1, CISPR 14-1: 1997, EN55014-1:1997-5
 - b. Intermittent interference voltage test conforming to GB4343-2003+A1, CISPR 14-1: 1997, EN55014-1:1997-5
 - c. Interference power test conforming to GB4343-2003+A1, CISPR 14-1:1997, EN55014-1:1997-6
 - d. Harmonic currents test conforming to GB4343-2003+A1, CISPR 14-1:EN 61000-3-2:1995
 - e. RF Electromagnetic Field Immunity test conforming to GB/T13926.3, IEC61000-4-3, PrEN55014-2 section 6.5
 - f. Electrical fast transient/burst immunity test conforming to GB/T13926.4, IEC61000-4-4, PrEN55014-2 section 6.2
 - g. Voltage dips and short interrupts immunity test conforming to IEC61000-4-11
 - h. Voltage variations immunity test conforming to IEC61000-4-11
 - i. Electrostatic discharge immunity test conforming to IEC61000-4-11

Electrical Specifications

- Input voltage range: 100 to 277 VAC (maximum voltage range: 90-305 VAC)
- Frequency: 47- 63Hz
- Power factor: > 0.90 at full load, total harmonic distortion(THD): <20% more than 80% load

- Inrush current: <25A at 25°C, 120V, cold start
- Input current: 0.27A at 120V
- Efficiency: 85% (typical), 91% (maximum), at full load, 220V
- Maximum output power: 25W
- Constant current regulation: $\pm 3\%$ over input line variation, load regulation accuracy: $\pm 4\%$
- Start-up time: <1 s, output overshoot: <10%
- Leakage current: 300uA (typical)
- Hold up time: half cycle
- Output over-voltage protection function
- Output over-current protection function
- Output short circuit protection: auto-recovery

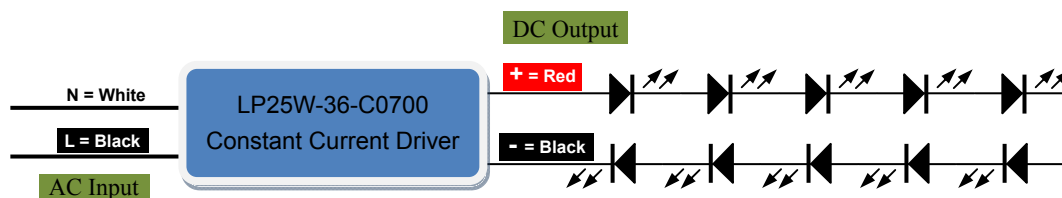
25W Constant current versions

No.	Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Power ⁽¹⁾ Factor	Output Power	Max. ⁽²⁾ Eff.
1	LP25W-200-C0120	No	No	120~200Vdc	120mA	$\pm 5\%$	0.90	25W	91%
2	LP25W-150-C0160	No	No	90~150Vdc	160mA	$\pm 5\%$	0.90	25W	91%
3	LP25W-100-C0250	No	No	60~100Vdc	250mA	$\pm 5\%$	0.90	25W	91%
4	LP25W-72-C0350	No	No	43~72Vdc	350mA	$\pm 5\%$	0.90	25W	90%
5	LP25W-62-C0400	No	No	37~62Vdc	400mA	$\pm 5\%$	0.90	25W	90%
6	LP25W-56-C0450	Yes	Yes	34~56Vdc	450mA	$\pm 5\%$	0.90	25W	90%
7	LP25W-48-C0520	Yes	Yes	29~48Vdc	520mA	$\pm 5\%$	0.90	25W	89%
8	LP25W-43-C0580	Yes	Yes	26~43Vdc	580mA	$\pm 5\%$	0.90	25W	89%
9	LP25W-36-C0700	Yes	Yes	21~36Vdc	700mA	$\pm 5\%$	0.90	25W	88%
10	LP25W-28-C0850	Yes	Yes	17~28Vdc	850mA	$\pm 5\%$	0.90	25W	88%
11	LP25W-24-C1040	Yes	Yes	14~24Vdc	1040mA	$\pm 5\%$	0.90	25W	87%
12	LP25W-20-C1250	Yes	Yes	13~20Vdc	1250mA	$\pm 5\%$	0.90	25W	86%
13	LP25W-12-C2100	Yes	Yes	7~12Vdc	2100mA	$\pm 5\%$	0.90	25W	85%

Note:

1. Typical power factor measured at 220VAC input, full load.
2. Maximum efficiency measured at 220VAC input, full load.

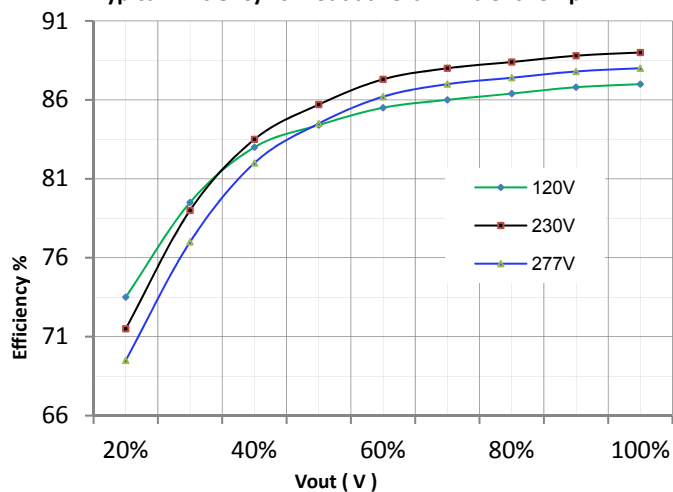
Typical Applications



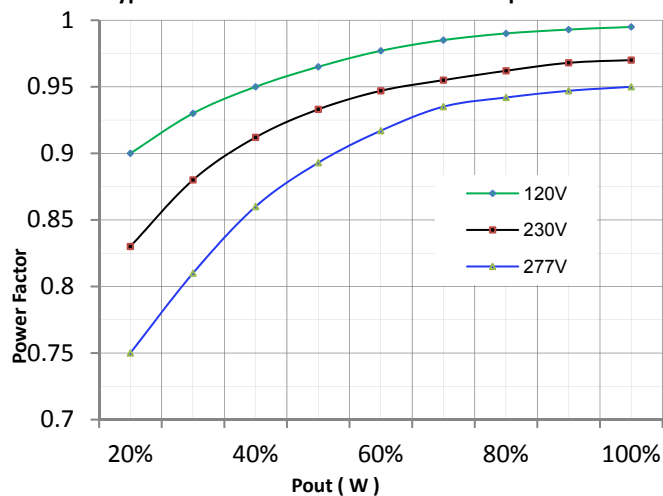
LED driver recommended application the following conditions

LED forward voltage: $V_F = 3.0V \sim 3.5V$, LED forward current $I_F = 700 \text{ mA}$

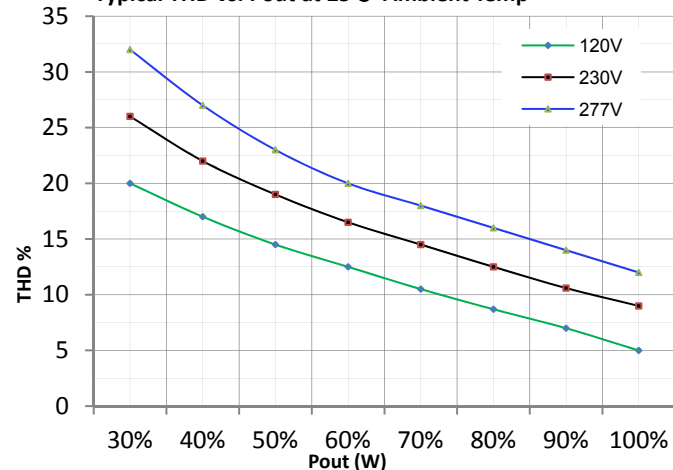
Typical Efficiency vs. Vout at 25°C Ambient Temp



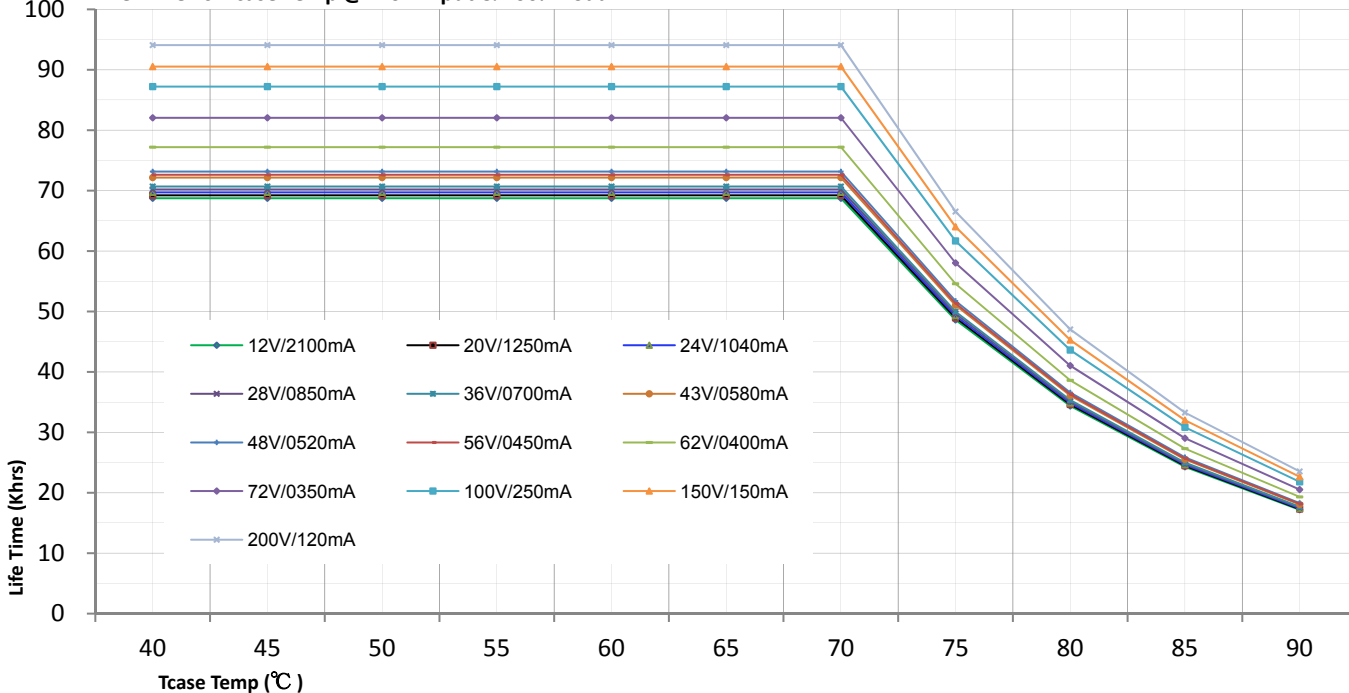
Typical PF vs. Pout at 25°C Ambient Temp

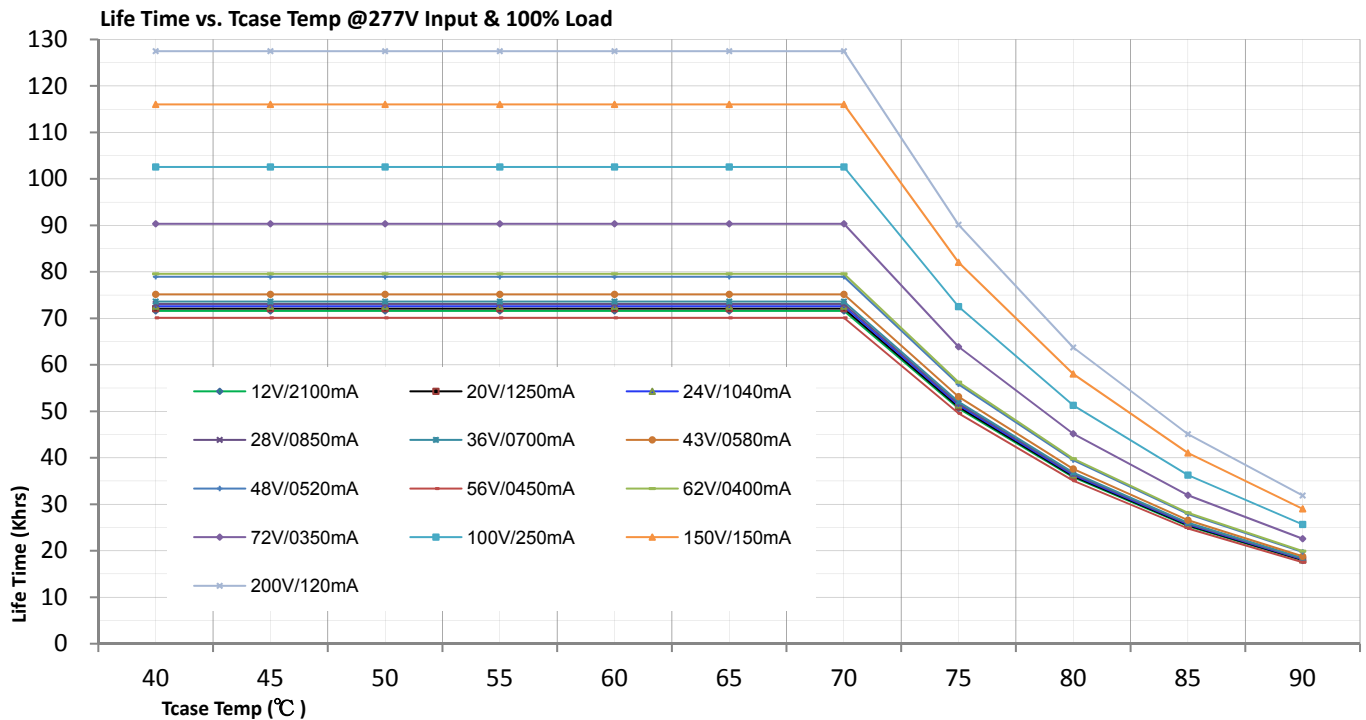


Typical THD vs. Pout at 25°C Ambient Temp



Life Time vs. Tcase Temp @120V Input & 100% Load





Installation

ABS + PC plastic shell;

Used with thermal conductivity and flame retardant glue potting;

AC input for connection the two cores ANSI/UL1015/AWG18 high temperature more than 105 °C copper wire;

Cable length: 150mm, stripping on the tin: 10mm

Where: L — black wire, N — white wire;

DC output for connection the two cores ANSI/UL1569/AWG18 high temperature more than 105°C copper wire;

Cable length: 150mm, stripping on the tin: 10mm

Including: DC+ — red wire, DC- — black wire;

This product has two $\Phi 3.6\text{mm}$ mounting holes for the positioning of the products used to install.

Order ID

P/N: LP25W-36-C0700

Description: 25W, 36Vdc voltage max, constant current 700mA max, constant current mode.

Product size

