

## 40 Watt — LP40W Series Small & Efficient Series

CONSTANT CURRENT LED DRIVER WITH ONE 40 Watt OUTPUT

US & CN LED DRIVER CLASS 2

Part Number: LP40W 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: 40 Watt  
 Input voltages: 100 to 277 VAC (maximum : 90-305 VAC)  
 Efficiency: Up to 92%  
 Suitable: For LED lamp driver  
 Warranty: 5 years



Size	Unit	Inch	Millimeter
	Case Length		3.15
Case Width		3.05	77.60
Case Height		1.02	26.00

### Special Features:

1. UL8750, UL1310 Class 2, CSA22.2 safety compliant
2. FCC 47CFR PART 15 compliant
3. A rated lifetime of 50,000 hours @ Tc = 75°C
4. Meet the RoHs directive, IP65 compliant
5. Suitable for high-temperature, high-dust location
6. Inrush Current Limiting Circuitry: AC line to line 1.5 kV, eliminates circuit breaker tripping, switch arcing and relay failure.
7. Single output, ranged from 7Vdc up to 200Vdc
8. Active PFC reduces power consumption
9. 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): 520,000 hours @ full load per MIL-217F notice 2
7. 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: <35A at 25°C, 120V, cold start
- Input current: 0.41A at 120V
- Efficiency: 85% (typical), 92% (maximum), at full load, 220V
- Maximum output power: 40W
- 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

### Safety & Compliance:

UL8750, UL1310 Class 2, CSA22.2, FCC, IP65 compliant



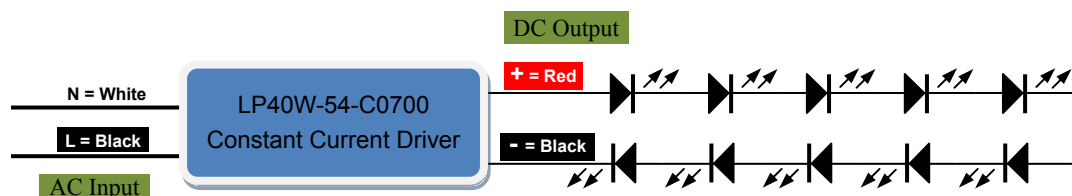
### 40W Constant current versions:

No.	Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Power <sup>(1)</sup> Factor	Output Power	Max. <sup>(2)</sup> Eff.
1	LP40W-200-C0200	No	No	120~200Vdc	200mA	$\pm 5\%$	0.90	40W	92%
2	LP40W-114-C0350	No	No	68~114Vdc	350mA	$\pm 5\%$	0.90	40W	92%
3	LP40W-100-C0400	No	No	60~100Vdc	400mA	$\pm 5\%$	0.90	40W	91%
4	LP40W-72-C0550	No	No	43~72Vdc	550mA	$\pm 5\%$	0.90	40W	90%
5	LP40W-54-C0700	Yes	Yes	32~54Vdc	700mA	$\pm 5\%$	0.90	40W	89%
6	LP40W-48-C0830	Yes	Yes	29~48Vdc	830mA	$\pm 5\%$	0.90	40W	88%
7	LP40W-43-C0930	Yes	Yes	26~43Vdc	930mA	$\pm 5\%$	0.90	40W	87%
8	LP40W-36-C1100	Yes	Yes	21~36Vdc	1100mA	$\pm 5\%$	0.90	40W	87%
9	LP40W-28-C1400	Yes	Yes	17~28Vdc	1400mA	$\pm 5\%$	0.90	40W	86%
10	LP40W-24-C1670	Yes	Yes	14~24Vdc	1670mA	$\pm 5\%$	0.90	40W	85%
11	LP40W-12-C3340	Yes	Yes	7~12Vdc	3340mA	$\pm 5\%$	0.90	40W	84%

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.

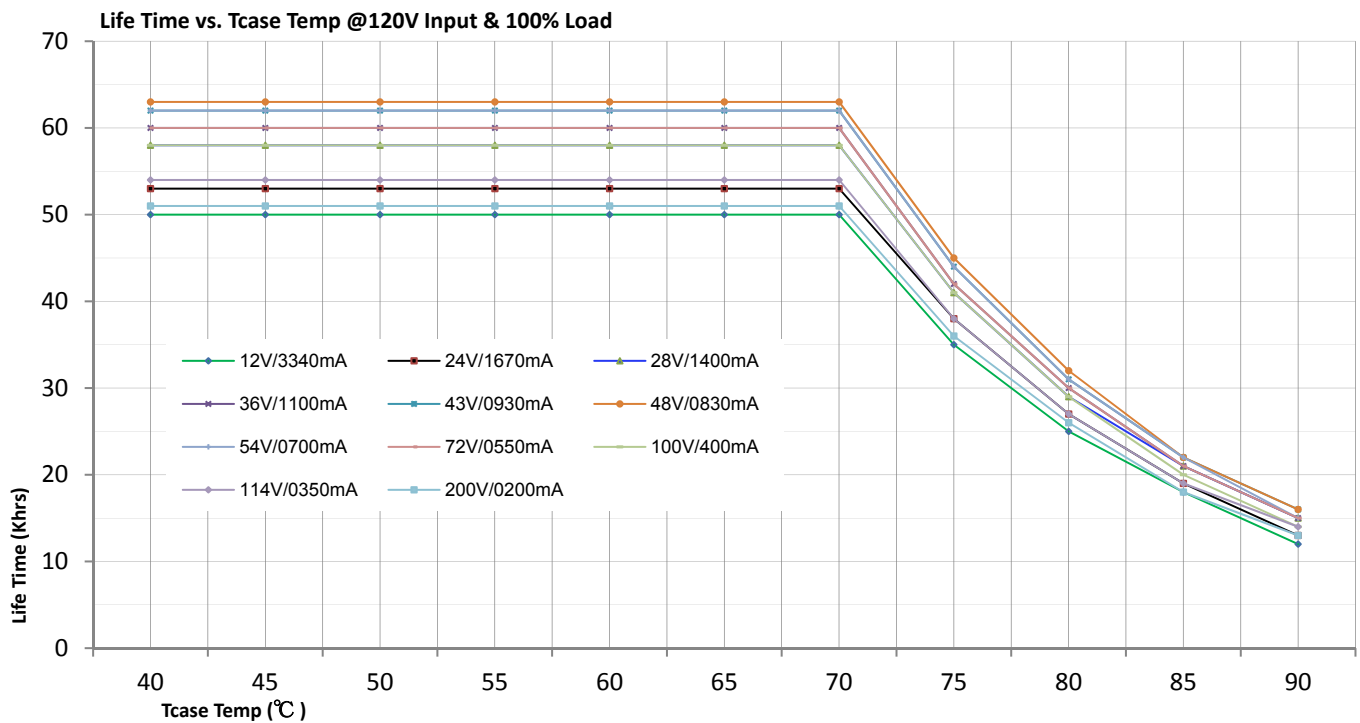
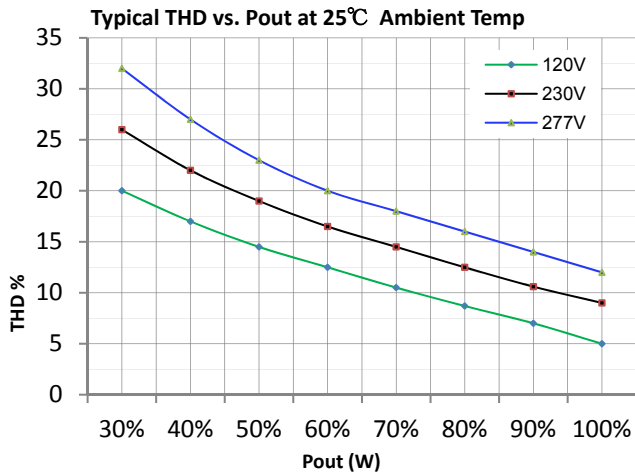
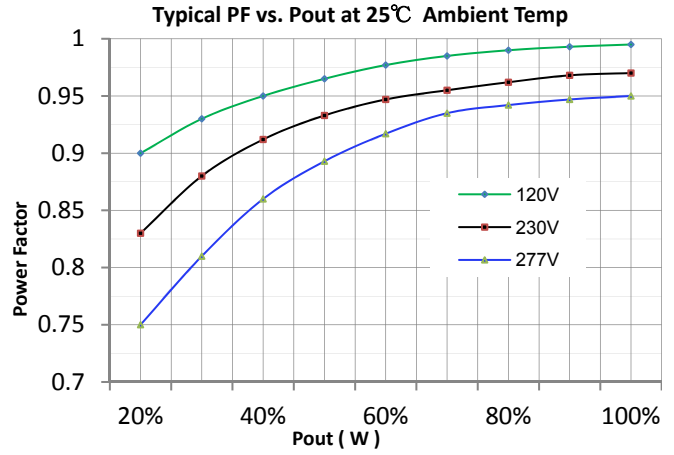
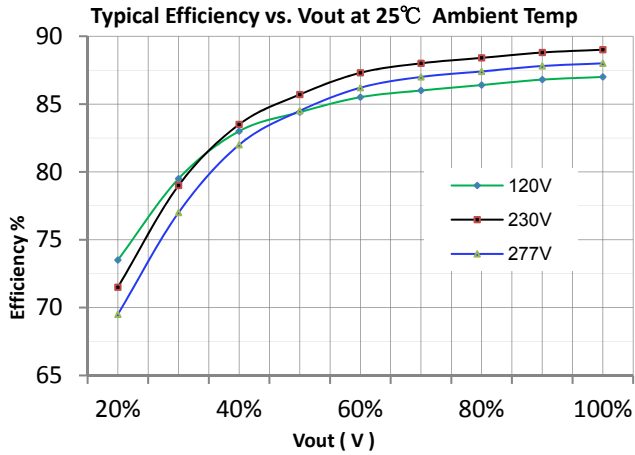
LED forward voltage:  $V_F = 3.0V \sim 3.5V$ ,

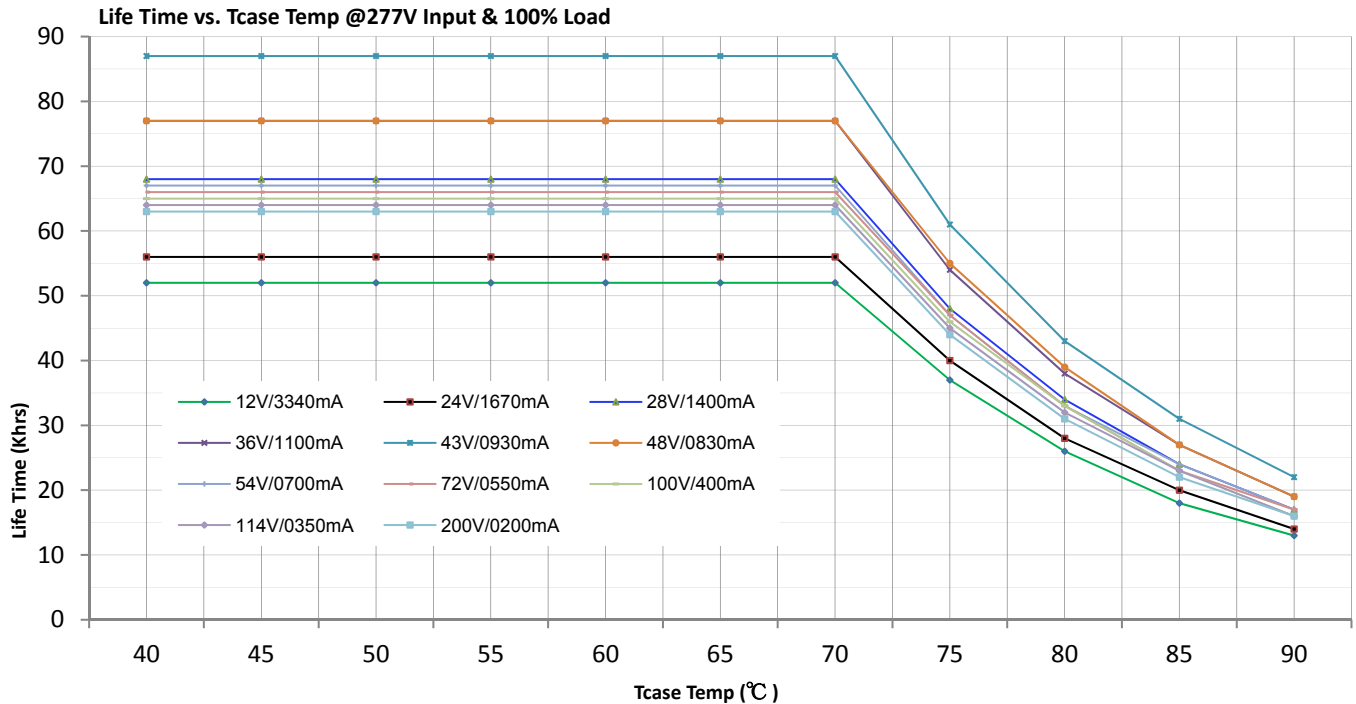
LED forward current  $I_F = 700 \text{ mA}$ .



# LED Optimized Drivers

Sino-US joint venture





### 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 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 wire;

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

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

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

### Order ID:

P/N: LP40W-54-C0700

Description: 40W, 54Vdc voltage max, constant current 700mA, constant current mode.

### Product size:

