



Excellent LED Drivers

Sino-US joint venture

35 Watt — LP35W Series Small & Efficient Series

CONSTANT CURRENT LED DRIVER WITH ONE 35 Watt OUTPUT

US & CN LED DRIVER CLASS 2

Part Number: LP35W Series
 Product mark: YG
 Manufactory: Shenzhen YIGUANG technology co., Ltd
 Driving mode: Constant current & voltage with isolation
 Technology: Single-Stage PFC & PSR technology
 Output Power: 35 Watt
 Input voltages: 100 to 277 VAC (maximum : 90-305 VAC)
 Efficiency: Up to 89%
 Suitable: For LED lamp driver
 Warranty: 5 years



Size \ Unit	Inch	Millimeter
Case Length	3.83	97.50
Case Width	1.63	41.50
Case Height	1.02	26.00

Special Features

1. UL8750, UL1310 Class 2, CSA22.2 safety compliant
2. FCC 47CFR PART 15 compliant
3. rated lifetime 50,000 hours, Tc 75°C, the worst models
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): 540,000 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: <30A at 25°C, 120V, cold start
- Input current: 0.35A at 120V
- Efficiency: 85% (typical), 89% (maximum), at full load, 220V
- Maximum output power: 35W
- Constant current regulation: ±3% over input line variation, load regulation accuracy: ±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

35W Constant current versions

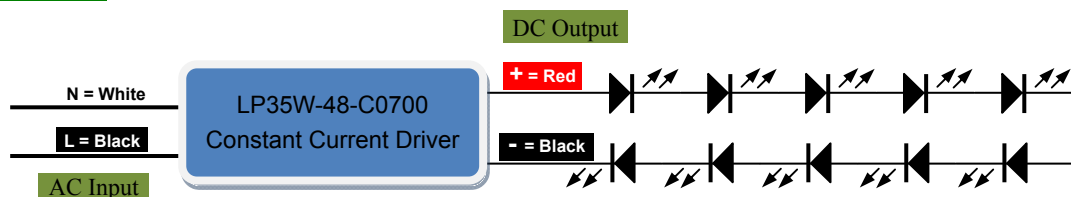
No.	Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Power ⁽¹⁾ Factor	Output Power	Max. ⁽²⁾ Eff.
1	LP35W-200-C0170	No	No	120~200Vdc	170mA	±5%	0.90	35W	89%
2	LP35W-100-C0360	No	No	60~100Vdc	360mA	±5%	0.90	36W	89%
3	LP35W-70-C0500	No	No	42~70Vdc	500mA	±5%	0.90	35W	89%
4	LP35W-63-C0550	No	No	38~63Vdc	550mA	±5%	0.90	35W	88%
5	LP35W-54-C0640	Yes	Yes	32~54Vdc	640mA	±5%	0.90	35W	88%
6	LP35W-48-C0700	Yes	Yes	29~48Vdc	700mA	±5%	0.90	34W	87%
7	LP35W-43-C0810	Yes	Yes	26~43Vdc	810mA	±5%	0.90	35W	87%
8	LP35W-40-C0875	Yes	Yes	24~40Vdc	875mA	±5%	0.90	35W	87%
9	LP35W-36-C1000	Yes	Yes	21~36Vdc	1000mA	±5%	0.90	36W	86%
10	LP35W-30-C1200	Yes	Yes	18~30Vdc	1200mA	±5%	0.90	36W	86%
11	LP35W-24-C1500	Yes	Yes	14~24Vdc	1500mA	±5%	0.90	36W	85%
12	LP35W-22-C1600	Yes	Yes	13~22Vdc	1600mA	±5%	0.90	36W	85%
13	LP35W-18-C2000	Yes	Yes	10~18Vdc	2000mA	±5%	0.90	36W	84%
14	LP35W-12-C3000	Yes	Yes	7~12Vdc	3000mA	±5%	0.90	36W	83%

35W Constant Voltage versions

No.	Part Number	US Class 2	CN Class 2	Output Voltage	Maximum Output Current	Voltage Accuracy	Power ⁽¹⁾ Factor	Output Power	Max. ⁽²⁾ Eff.
1	LP35W-48	Yes	Yes	48Vdc	700mA	±5%	0.92	35W	87%
2	LP35W-36	Yes	Yes	36Vdc	1000mA	±5%	0.92	35W	86%
3	LP35W-24	Yes	Yes	24Vdc	1500mA	±5%	0.92	35W	85%
4	LP35W-12	Yes	Yes	12Vdc	3000mA	±5%	0.92	35W	83%

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

Typical Applications



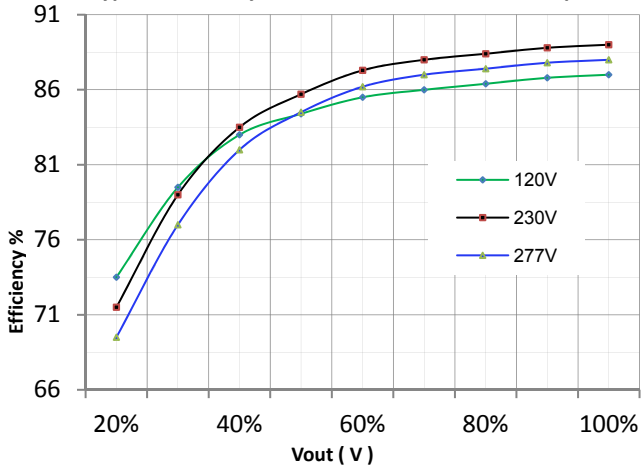
LED forward voltage: $V_F = 3.0V \sim 3.5V$, LED forward current $I_F = 700 \text{ mA}$



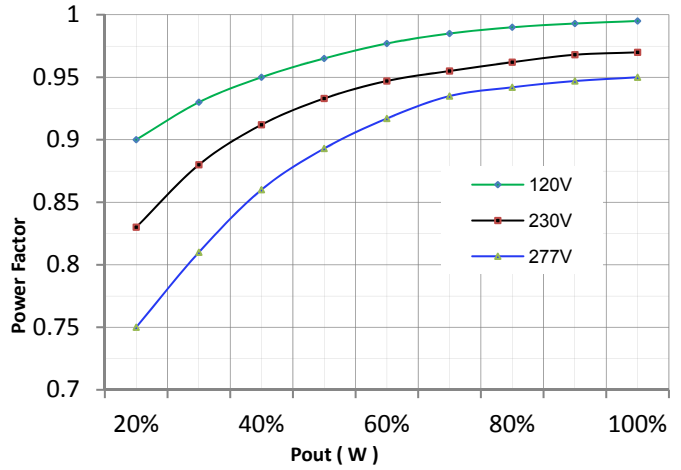
Excellent LED Drivers

Sino-US joint venture

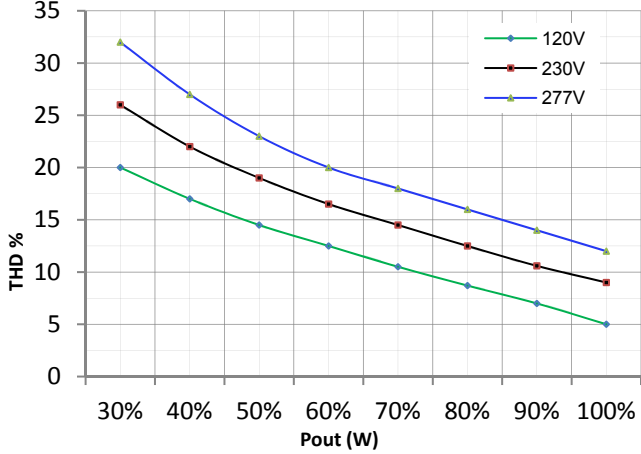
Typical Efficiency vs. Vout at 25°C Ambient Temp



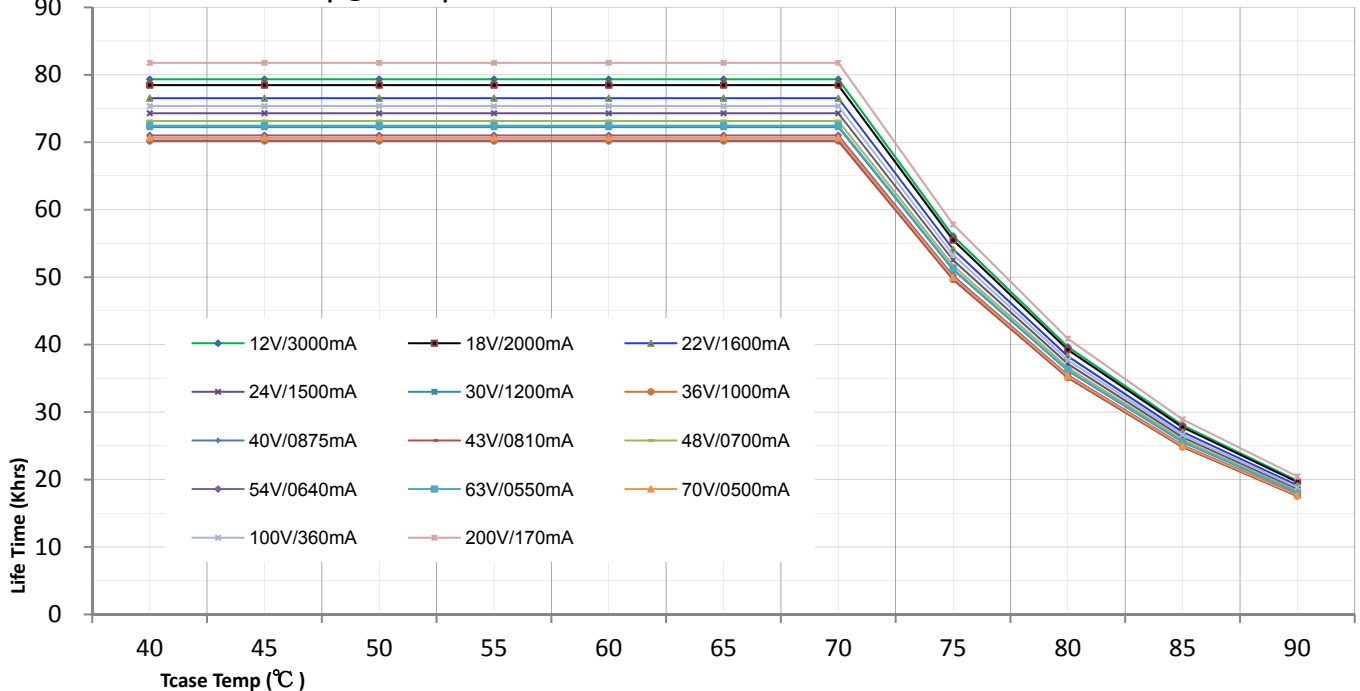
Typical PF vs. Pout at 25°C Ambient Temp

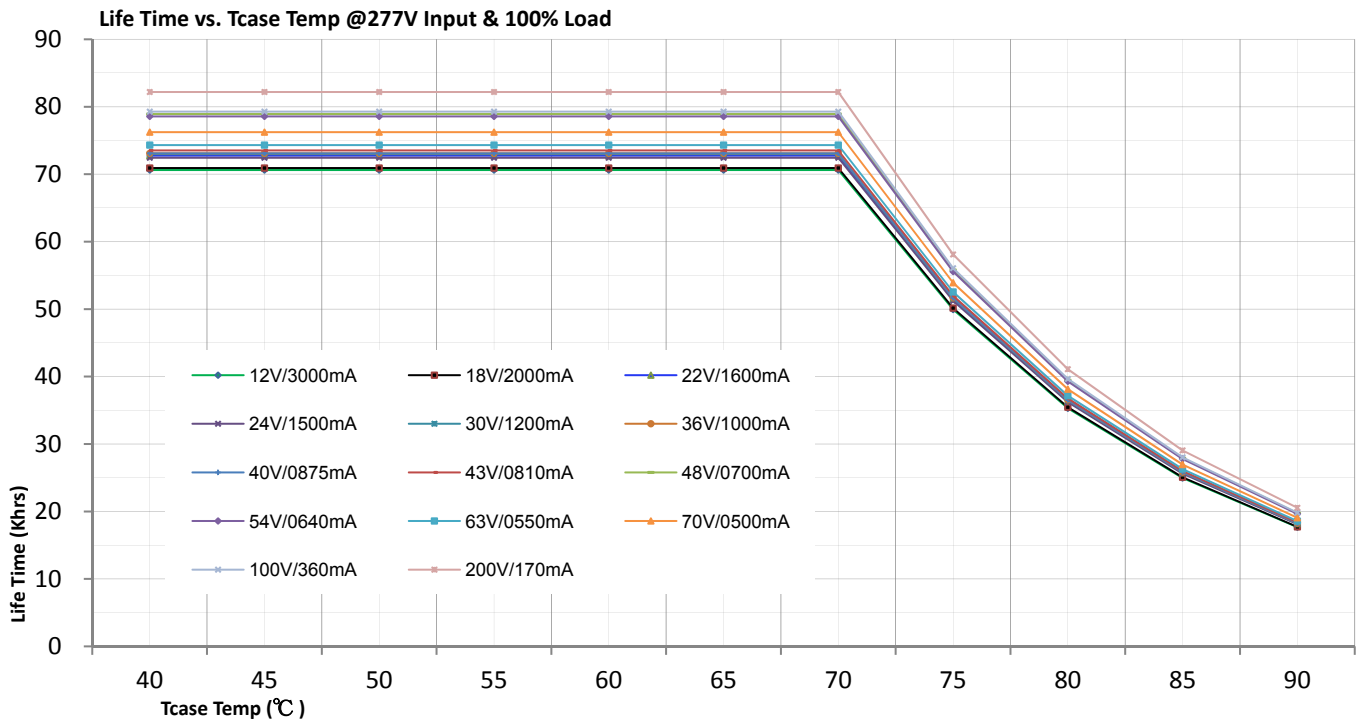


Typical THD vs. Pout at 25°C Ambient Temp



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 wire;

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

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

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

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

Where: DC+ — red, DC- — black;

This product has two $\Phi 3.6$ mm mounting holes.

Order ID

P/N: LP35W-48-C0700

Description: 35W, 48Vdc voltage max, constant current 700mA, constant current mode.

Product size

