

SOSEN LED Driver, Your Smart Choice

Specifications

SS-240UV Series LED Driver

Model: SS-240UV-XX

Description: 240W LED Driver

Rev.: V00

Release Date: 2025-07-09

SS-240UV Series LED Driver

SOSEN
LED DRIVER



LED DRIVER

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UV Series



Features:

- Efficiency up to 90%
- 3-in-1 Dimming, Dimmable Off
- Protections: SCP/OVP
- OUTPUT PS-ON signal start control
- Warranty: 3 years
- Ultra-thin metal casing design

Description:

SS-240UV series products are 240W constant current LED driver power supplies with wide range output characteristics, ultra-high efficiency, compact housing design, good heat dissipation, and all-round protection, which is favorable to the design of LED lights and reduce the cost of LED lighting manufacturers.

Applications:

UVLED Exposure Unit, UVLED Printer, UVLED Tunnel device, UVLED Curing Equipment, UVLED Driver, UVLED Plant lighting

Model List:

Model	AC Input Range	Max. Pout	Vout Range	Adjustable O/P Current Range	Standby Power	Eff.(Typ.)	Max.Tc
SS-240UV-75E	200-240Vac	240W	45-75V	1.6-3.2A	5W	90%	75°C

Note:

- 1.Default Tested: at 220Vac, full load, Ta 25°C.
- 2.The performance of the LED Driver can be guaranteed within the full power Vo range.The voltage lower than full power Vo range, it is need to test the performance with the LED module;

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Input Characteristics:

Parameter	Min.	Typ.	Max.	Remark
Rated AC Input Range	200Vac		240Vac	
AC Input Range	180Vac		264Vac	Less than 200Vac, refer to derating curve
Input Frequency Range	47Hz	50/60Hz	63Hz	
Max Input Current			3.5A	200Vac, Normal temperatureFull load
Max Input Power			275W	200Vac, Normal temperatureFull load
Max Inrush Current(230Vac)			100A	Cold start
Standby Power			5W	220Vac/50Hz, No load/Dim to off

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O/P Characteristics:

Parameter	Min.	Typ.	Max.	Remark
O/P Voltage Range	45V		75V	
No Load Voltage			90V	
Rated O/P Current	1.6A		3.2A	
O/P Power			240W	
Efficiency @220Vac	88.0%	89.0%		Full load
O/P Current Tolerance	-5%		+5%	
O/P Current Ripple(PK-PK)			10%	Full load, Bandwidth limitation 20MHz
Line Regulation	-1%		+1%	
Load Regulation	-2%		+2%	
Start-up Current Overshoot			10%	Full load
Start-up Time			1S	
PS-ON level signal	6V		24V	Turn-on current <5mA, PS-ON+ /PS-ON-Reverse connection or single-pole open circuit is strictly prohibited
PS-ON signal start delay			50mS	Full load, PS-ON $\geq$ 6V until output current up to 90%
Temperature Coefficient	-0.1%/°C		+0.1%/°C	Tc:0°C~90°C
Short Circuit Protection			20W	Long time short circuit without damage, constant current mode
Temperature Protection (Device)			130°C	Accuracy +5°C,-3°C Shutdown Mode, Automatic recovery after resolving anomaly

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Other Characteristics:

Parameter		Min.	Typ.	Max.	Remark
0-10V Dimming	Dim Vmax	0V		12V	DIM+ source current 100uA.
	Dim Range	10%Iomax		100%Ioset	Dimming prohibits reverse connection
	Rec.Dim Range	0V		10V	
PWM Dimming	PWM High	9.8V		10.2V	DIM+ source current 100uA.
	PWM Low	0V		0.3V	Dimming prohibits reverse connection
	Frequency	1KHz		2KHz	
	PWM Duty	0%		100%	
Resistor Dimming	Resistance	0Kohm		100Kohm	DIM+ source current 100uA.
	Dim Range	10%Iomax		100%Ioset	
Dim to Off	Dim-off	0.5V	0.6V	0.7V	
	Dim-on	0.6V	0.7V	0.8V	
Resistor shutdown	Dim-off	5K	6K	7K	
	Dim-on	7K	8K	9K	
Lifetime(Tc≤70°C)		≥30,000 hours			220Vac
MTBF		200,200 hours			220Vac,Full load, Ta=25°C (MIL-HDBK-217F)
Tc		-30~40°C			
Warranty		3 years			Shell temperature: 50°C 80% load
Net Weight		537g			
Dimension		203mm*98mm*29.8mm			L x W x H

NOTE: All the parameters above are tested Ta 25°C and LED load, unless specified.

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Environmental Requirements

Parameter	Min.	Typ.	Max.	Remark
Operating Temperature(Tcase)	-30°C	25°C	+40°C	
Storage Temperature	-40°C	25°C	+90°C	
Operation Humidity	10%RH		90%RH	
Storage Humidity	5%RH		95%RH	
Altitude	-65m		4000m	

Safety and EMI/EMS Standards

Certification	Standard	Status	Remark
CCC	GB 19510.14-2009		
CE	EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013		

EMI/EMS	Criterion	Remark
Conduction Emission	/	
Radiation Emission	/	
Harmonic Current Emissions	/	
Surge	IEC/EN 61000-4-5	DM: 2kV,CM: 2kV,Criterion B
Ring Wave	/	

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Safety Test Items:

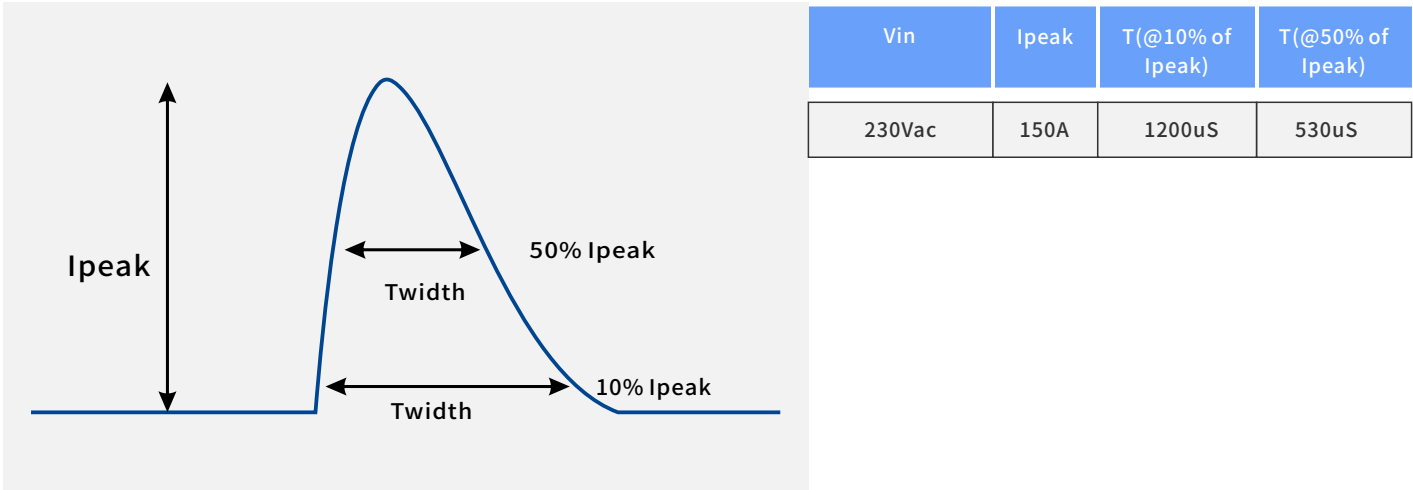
Safety Test Items	Technical Indicators	Remark
Insulation Requirements	Safety Test Requirements	
Input-O/P	1500Vac/5mA	Reinforced insulation
Input-Case	1500Vac/5mA	Basic insulation
O/P-Case	500Vac/10mA	Basic insulation
Insulation Resistance	$\geq 10M\Omega$	Input-O/P,Test voltage:500Vdc
Ground Resistance	$\leq 0.1\Omega$	25A/1min
Leakage Current	$\leq 0.75mA$	240Vac

NOTE:

1. During the voltage withstand test, please short-circuit the input AC-L/AC-N and output positive/negative/ PS-ON+/PS-ON -/DIM+/DIM - all together conduct testing, otherwise it may damage the power supply.

Performance Curves:

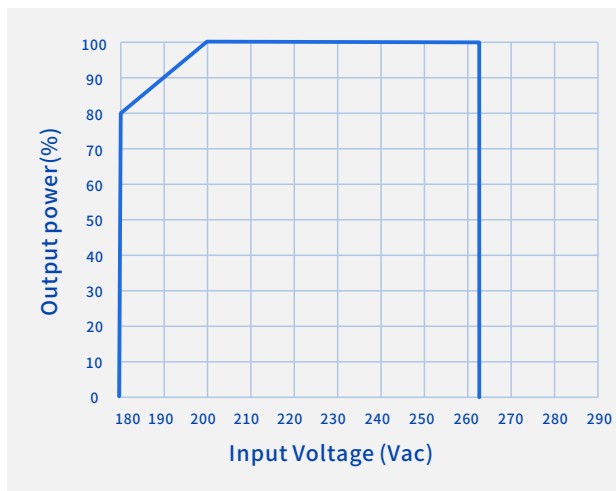
Input Inrush Current



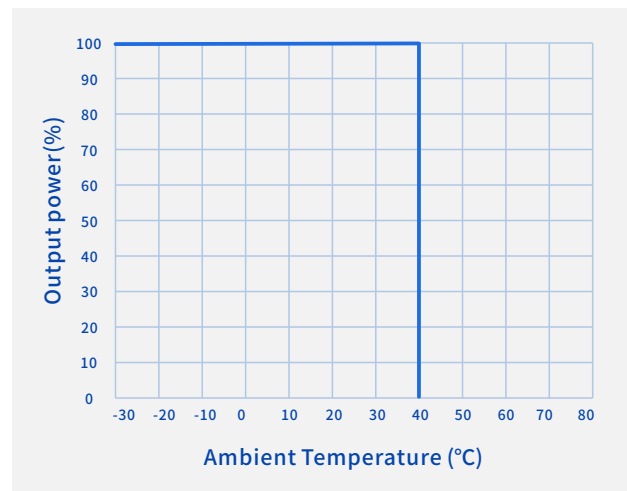
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Performance Curves:

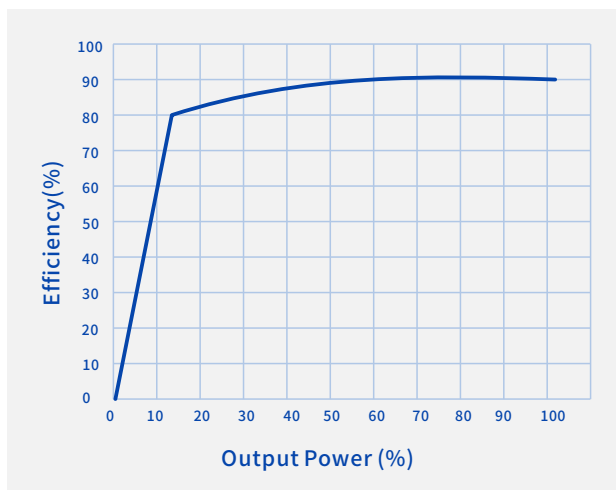
O/P Power Vs. Input Voltage
(Ta Max.40°C)



O/P Power Vs. Case Temperature



Efficiency Vs. O/P Voltage
(Vin=220Vac)

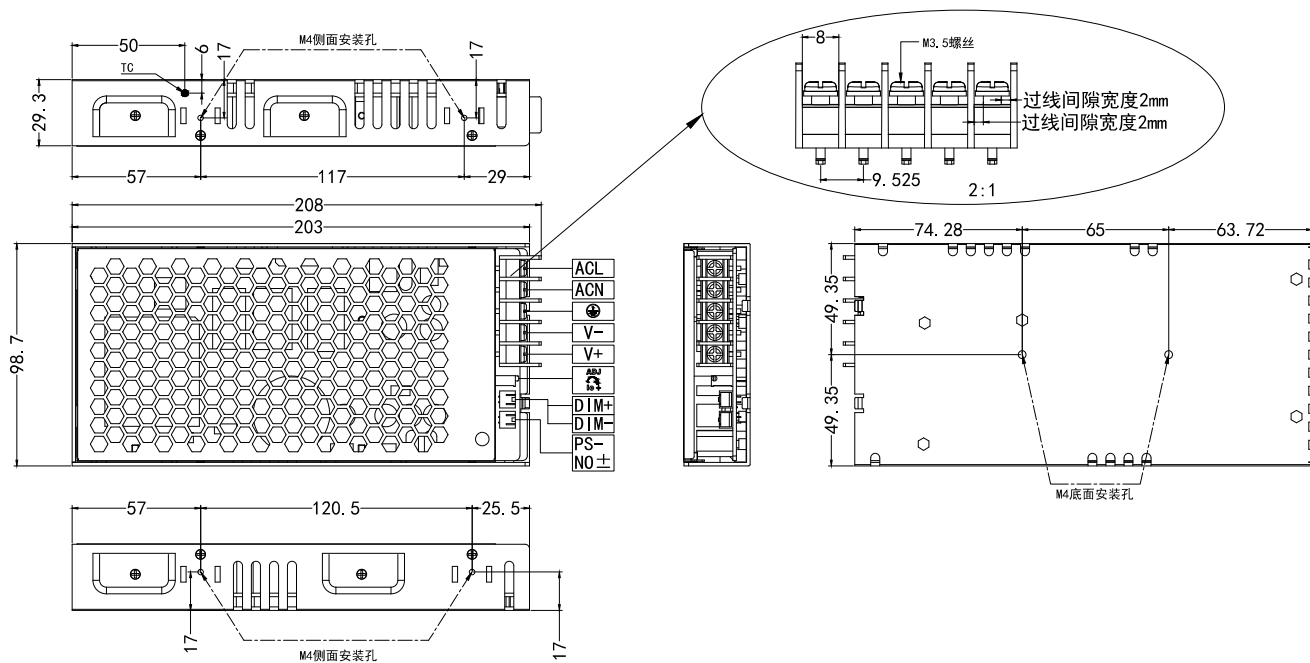


O/P Power Vs. Dimming



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Mechanical Characteristics



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Package

- Outside carton dimension: $L \times W \times H = 203\text{mm} \times 99\text{mm} \times 29.8\text{mm}$;
- 14PCS/Carton;
- Net weight/Piece: 0.537kg; Gross weight/Carton: 8.475kg;
- Please refer to the product name, model number, manufacturer identification, QC PASS, manufacturing date on the package.

Transportation

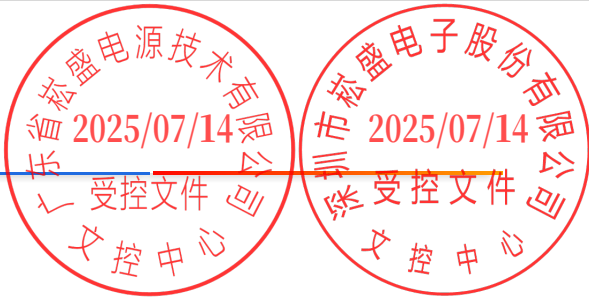
Packaging is designed suitable for transportation by trucks, vessels and flights. The products should be avoided direct sunlight and rain, loaded/unloaded with caution.

Storage

The product storage meets the standard of the GB 3873—83.
Products should be rechecked if stored for over 1 year before assembly.

RoHS

Products comply with RoHS Directive (2011/65/EU) and amendment 2015/863/EU.



Revision History

Version	Description of Update	Updated Date	Remark
V00	Original Release	2025/07/09	