

## Features

- High Efficiency (Up to 93%)
- Constant Voltage Output
- Input Surge Protection: DM 4kV, CM 6kV
- All-Around Protection: OVP, OCP, SCP, OTP
- IP67 and UL Dry / Damp / Wet Location
- SELV
- TYPE HL, for use in a Class I, Division 2 hazardous (Classified) location
- 5 Years Warranty



## Description

The EUV-150SxxxST series is a 150W, constant-Voltage LED driver that operates from 90-305 Vac input with excellent power factor. It is created for many lighting applications including high bay, tunnel and roadway, etc. The high efficiency of these drivers and compact metal case enables them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, over current, short circuit, and over temperature.

## Models

Output Voltage	Input Voltage Range(1)	Output Current Range	Max. Output Power	Typical Efficiency (2)	Power Factor		Model Number (3)
					110Vac	220Vac	
12 Vdc	90 ~ 305 Vac	0~12.5 A	150 W	92%	0.99	0.96	EUV-150S012ST
24 Vdc	90 ~ 305 Vac	0~6.25 A	150 W	93%	0.99	0.96	EUV-150S024ST
36 Vdc	90 ~ 305 Vac	0~4.17 A	150 W	93%	0.99	0.96	EUV-150S036ST
42 Vdc	90 ~ 305 Vac	0~3.57 A	150 W	93%	0.99	0.96	EUV-150S042ST
48 Vdc	90 ~ 305 Vac	0~3.13 A	150 W	93%	0.99	0.96	EUV-150S048ST
54 Vdc	90 ~ 305 Vac	0~2.78 A	150 W	93%	0.99	0.96	EUV-150S054ST

**Notes:** (1) UL Certified input voltage range: 100-277Vac; otherwise 100-240Vac (except KS).

(2) Measured at 100% load and 220 Vac input.

(3) SELV output.

## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90 Vac	-	305 Vac	
Input Frequency	47 Hz	-	63 Hz	
Leakage Current	-	-	0.75 MIU	UL8750; 277Vac/ 60Hz, grounding effectively
	-	-	0.70 mA	IEC60598-1; 240Vac/ 60Hz, grounding effectively

## Input Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Input AC Current	-	-	1.93 A	Measured at 100% load and 100 Vac input.
	-	-	0.85 A	Measured at 100% load and 220 Vac input
Inrush Current(I <sup>2</sup> t)	-	-	1.5 A <sup>2</sup> s	At 220Vac input, 25°C cold start, duration=1.2 ms, 10%Ipk-10%Ipk.
PF	0.90	-	-	At 100-277Vac, 50-60Hz, 100% Load
THD	-	-	20%	

## Output Specifications

Parameter	Min.	Typ.	Max.	Notes	
Output Voltage Tolerance	-2.5%	-	2.5%	EUV-150S042ST. At 100% load condition.	
	-5%	-	5%	Others. At 100% load condition.	
Ripple and Noise (pk-pk)	-	-	2% V <sub>O</sub>	Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.	
Output Overshoot / Undershoot	-	-	10%	When power on or off.	
Line Regulation	-	-	±1%	At 100% load condition.	
Load Regulation	-	-	±2%		
Turn-on Delay Time	-	0.9 s	1.5 s	Measured at 110Vac input, 100% Load	
	-	0.5 s	1.0 s	Measured at 220Vac input, 100% Load	
Load Dynamic Response	Output Deviation	-	-	5% V <sub>O</sub>	R/S: 1 A/ uS
	Settling Time	-	-	10 mS	Load: 25% ~ 75% 100% load.
Temperature coefficient	-	0.03%/°C	-	Case temperature = 0°C ~Tc max	

## General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency at 110 Vac input:				Measured at 100% load and steady-state temperature in 25°C ambient; (Efficiency will be about 1.0% lower if measured immediately after startup.)
V <sub>O</sub> = 12 V	88%	89%	-	
V <sub>O</sub> = 24 V	89%	90%	-	
V <sub>O</sub> = 36 V	89%	90%	-	
V <sub>O</sub> = 42 V	89%	90%	-	
V <sub>O</sub> = 48 V	89%	90%	-	
V <sub>O</sub> = 54 V	89%	90%	-	
Efficiency at 220 Vac input:				Measured at 100% load and steady-state temperature in 25°C ambient; (Efficiency will be about 1.0% lower if measured immediately after startup.)
V <sub>O</sub> = 12 V	91%	92%	-	
V <sub>O</sub> = 24 V	92%	93%	-	
V <sub>O</sub> = 36 V	92%	93%	-	
V <sub>O</sub> = 48 V	92%	93%	-	
V <sub>O</sub> = 42 V	92%	93%	-	
V <sub>O</sub> = 54 V	92%	93%	-	