

# LSU85A series

85W LED Power Supply

## Features:

- Wide Operating Voltage 90 to 305 VAC, 47 to 63 Hz
- Internal EMI filter
- Active Power Factor Correction
- C.C. Mode + C.V. Mode  
Constant Current: 0.1~4.04A  
Constant Voltage: 21~50V
- Over Voltage, Over Current, Over Temperature (optional)
- Class I
- 3 year warranty



## Electrical Characteristics:

Vin	Safety Approvals Input Voltage Range	100~277VAC
	Operate Voltage Range	90~305VAC
fin	Input Frequency	47~63Hz
PF	Power Factor Correction	Io=Full load, Vin=90~280VAC 0.90~1.0
Po	Output Power Range	See rating chart
Vo	Output Voltage Range	See rating chart
Io	Output Current Range	See rating chart
ilil	Input Current (Low Line)	Io=Full load, Vin=100VAC 1.3A
ilih	Input Current (High Line)	Io=Full load, Vin=240VAC 0.5A
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC 35A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC 70A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC 86~92%
REG-i	Line Regulation	Io=Full Load 0.5~1%
REG-o	Load Regulation	Vin=230VAC (C.C.) 5%
	Load Regulation	Vin=230VAC (C.V.) 5%
OVP	Over Voltage Protection	103~105%
OCP	Over Current Protection	105% (max.)
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC 4mS (max.)
Th	Hold-Up Time	Io=Full Load, Vin=100VAC 12mS (min.)
Ts	Start Up Time	Io=Full Load, Vin=100VAC 1S (max.)
Vp-p	Ripple & Noise (Peak to Peak)	Full Load 1% (max.)
Ilk	Safety Ground Leakage Current	Vin=240VAC/60Hz 0.75mA (max.)
TC	Temperature Coefficient	All output ±0.04%/°C
Pno	No-Load Power Consumption	No load, Vin=230VAC See rating chart
Vps	Dielectric Withstanding Voltage	Primary to secondary 4346VAC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE 1798VAC (min.)
Ris	Isolation Resistance	Test Voltage=500VDC 50MΩ (min.)

## Environmental

To	Operating Temperature	See derating curve
Ts	Storage Temperature	-40~85°C
Ho	Operating Humidity	0~95%
Hr	Storage Humidity	0~95%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	0.1M Hrs (min.)
Pd	Derate linearly from 100% load at 60°C to 50% load at 70°C	

## Application:

- Outdoor installations

## Safety Approvals:



UL/c-UL(UL8750:1st edition)

TUV(EN61347-1: 2008,  
IEC61347-1: 2007,  
EN/IEC61347-2-13: 2006)

CE-EMC(EN55015: 2006+A2: 2009  
& EN61547: 2009)



### Output Voltage And Current Rating Chart ( Single Output ) :

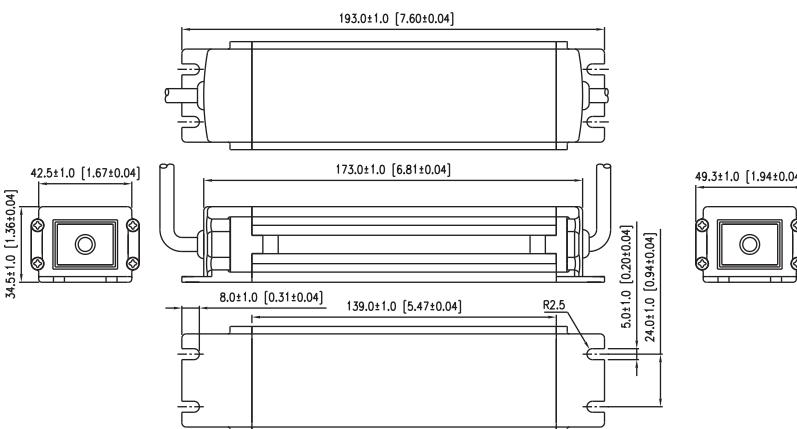
Model Number	Output Voltage	Output Current	Load Regulation	Max. Output Power	Pno (max.)
LSU85A-108-21V	21 VDC	0.1 ~ 4.04 A	5%	85W	1W
LSU85A-108-22V	22 VDC	0.1 ~ 3.86 A	5%	85W	1W
LSU85A-108-23V	23 VDC	0.1 ~ 3.69 A	5%	85W	1W
LSU85A-108-24V	24 VDC	0.1 ~ 3.54 A	5%	85W	1W
LSU85A-108-25V	25 VDC	0.1 ~ 3.40 A	5%	85W	1W
LSU85A-108-26V	26 VDC	0.1 ~ 3.26 A	5%	85W	1W
LSU85A-108-27V	27 VDC	0.1 ~ 3.14 A	5%	85W	1W
LSU85A-109-27V	27 VDC	0.1 ~ 3.14 A	5%	85W	1W
LSU85A-109-28V	28 VDC	0.1 ~ 3.03 A	5%	85W	1W
LSU85A-109-29V	29 VDC	0.1 ~ 2.93 A	5%	85W	1W
LSU85A-109-30V	30 VDC	0.1 ~ 2.83 A	5%	85W	1W
LSU85A-109-31V	31 VDC	0.1 ~ 2.74 A	5%	85W	1W
LSU85A-109-32V	32 VDC	0.1 ~ 2.65 A	5%	85W	1W
LSU85A-109-33V	33 VDC	0.1 ~ 2.57 A	5%	85W	1W
LSU85A-110-33V	33 VDC	0.1 ~ 2.57 A	5%	85W	1W
LSU85A-110-34V	34 VDC	0.1 ~ 2.50 A	5%	85W	1W
LSU85A-110-35V	35 VDC	0.1 ~ 2.42 A	5%	85W	1W
LSU85A-110-36V	36 VDC	0.1 ~ 2.36 A	5%	85W	1W
LSU85A-110-37V	37 VDC	0.1 ~ 2.29 A	5%	85W	1W
LSU85A-110-38V	38 VDC	0.1 ~ 2.23 A	5%	85W	1W
LSU85A-110-39V	39 VDC	0.1 ~ 2.17 A	5%	85W	1W
LSU85A-110-40V	40 VDC	0.1 ~ 2.12 A	5%	85W	1W
LSU85A-111-40V	40 VDC	0.1 ~ 2.12 A	5%	85W	1W
LSU85A-111-41V	41 VDC	0.1 ~ 2.07 A	5%	85W	1W
LSU85A-111-42V	42 VDC	0.1 ~ 2.02 A	5%	85W	1W
LSU85A-111-43V	43 VDC	0.1 ~ 1.97 A	5%	85W	1W
LSU85A-111-44V	44 VDC	0.1 ~ 1.93 A	5%	85W	1W
LSU85A-111-45V	45 VDC	0.1 ~ 1.88 A	5%	85W	1W
LSU85A-111-46V	46 VDC	0.1 ~ 1.84 A	5%	85W	1W
LSU85A-111-47V	47 VDC	0.1 ~ 1.80 A	5%	85W	1W
LSU85A-111-48V	48 VDC	0.1 ~ 1.77 A	5%	85W	1W
LSU85A-111-49V	49 VDC	0.1 ~ 1.73 A	5%	85W	1W
LSU85A-111-50V	50 VDC	0.1 ~ 1.70 A	5%	85W	1W

The output voltage range will vary from Vo to 0.6\*Vo of each model on C.C. Mode.

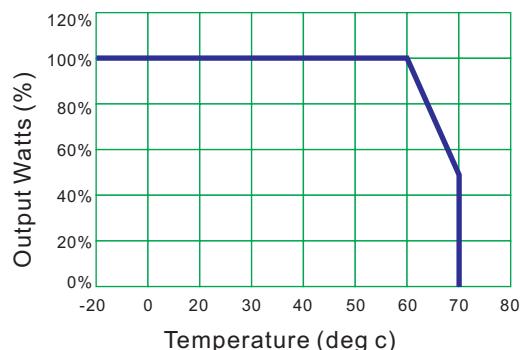
Input Connector : SJTW, 18AWGx3C (1Ft)

Output Connector : SJTW, 18AWGx2C (1Ft)

### Mechanical Specifications:



### Derating Curve :



1. Operating Temperature: -20 to 70°C
2. Derate linearly from 100% load at 60°C to 50% load at 70°C

Note:

1. Dimensions are shown in inches or mm .

2. Weight: 530~600gs approx.