

# YSD100S SERIES 100W



Yingjiao's step shape power family are designed with ultra-slim plastic housing and for full range .

The series are isolation Class II Level, achieving high efficiency and low no-load power consumption. They provide adjustable DC output voltage .

The good performance can be used for building automation, household and industrial control systems etc.

## Features



Isolation Class II



Class 2/Pass LPS (limited power source)



Ultra Slim Step Shape



DC Output Voltage Adjustable



Protection: Short Circuit/Overload/  
Over Voltage



Over Voltage Category II



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER
YSD100S-1207100	12V	7.1A	85.2W
YSD100S-1506130	15V	6.13A	92W
YSD100S-1506500	15V	6.5A	97.5W
YSD100S-2403830	24V	3.83A	92W
YSD100S-2404170	24V	4.17A	100W
YSD100S-4801920	48V	1.92A	92.2W
YSD100S-4802080	48V	2.08A	100W

## Input

VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC
FREQUENCY RANGE	47 ~ 63Hz
INRUSH CURRENT	COLD START 35A/115VAC 70A/230VAC
AC CURRENT	3A/115VAC 1.6A/230VAC
EFFICIENCY	88% YSD100S-1207100 89% YSD100S-1506130 89% YSD100S-1506500 90% YSD100S-2403830 90% YSD100S-2404170 90% YSD100S-4801920 90% YSD100S-4802080

## Output

RIPPLE & NOISE	120mVp-p	YSD100S-1207100
	120mVp-p	YSD100S-1506130
	120mVp-p	YSD100S-1506500
	150mVp-p	YSD100S-2403830
	150mVp-p	YSD100S-2404170
	240mVp-p	YSD100S-4801920
	240mVp-p	YSD100S-4802080
VOLTAGE ADJ. RANGE	12-13V	YSD100S-1207100
	15-17V	YSD100S-1506130
	13.5-18.0V	YSD100S-1506500
	24-25.5V	YSD100S-2403830
	21.6-29V	YSD100S-2404170
	48-48.7V	YSD100S-4801920
	43.2-55.2V	YSD100S-4802080
VOLTAGE TOLERANCE	$\pm 2.0\%$	
LINE REGULATION	$\pm 1.0\%$	
LOAD REGULATION	$\pm 1.0\%$	
SETUP, RISE TIME	500ms, 50ms/100-240VAC at full load	
HOLD UP TIME (Typ.)	30ms/100-240VAC at full load	

## Protection

OVER LOAD	102 ~ 110% rated output power ; (Below 92.2W)	
	105 ~ 150% rated output power;(above 92.2W)	
	Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed	
	Constant current limiting within 50%~100% rated output voltage, recovers automatically after fault condition is removed	
OVER VOLTAGE	14.2-16.2V	YSD100S-1207100
	18.8-22.5V	YSD100S-1506130
	18.8-22.5V	YSD100S-1506500
	30-36V	YSD100S-2403830
	30-36V	YSD100S-2404170
	56.5-64.8V	YSD100S-4801920
	56.5-64.8V	YSD100S-4802080
Protection type : Shut down o/p voltage, re-power on to recover		

## Environment

WORKING TEMP.	-20℃ ~ +70℃
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP., HUMIDITY	-40℃ ~ +85℃ , 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/℃ (0 ~ 50℃ ) RH non-condensing
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6
OPERATING ALTITUDE	5000 meters
OVER VOLTAGE CATEGORY	II;According to EN62368-1;altitude up to 2000 meters

## SAFETY & EMC

<b>SAFETY REGULATIONS</b>	UL62368-1, BS EN/EN62368-1
<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC
<b>INSULATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25 °C / 70% RH
<b>EMC EMISSION</b>	BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3
<b>EMC IMMUNITY</b>	BS EN/EN61000-4-2,3,4,5,6,8,11

## Note

- 1.All parameters NOT specially mentioned at 230VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured from peak to peak with band width limit of 20MHz(0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25 °C ambient temperature).
- 3.Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- 4.Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5.Efficiency test after 30 minutes of burn-in.
- 6.The ambient temperature derating of 3.5 °C /1000m for operating altitude higher than 2000m(6500ft).

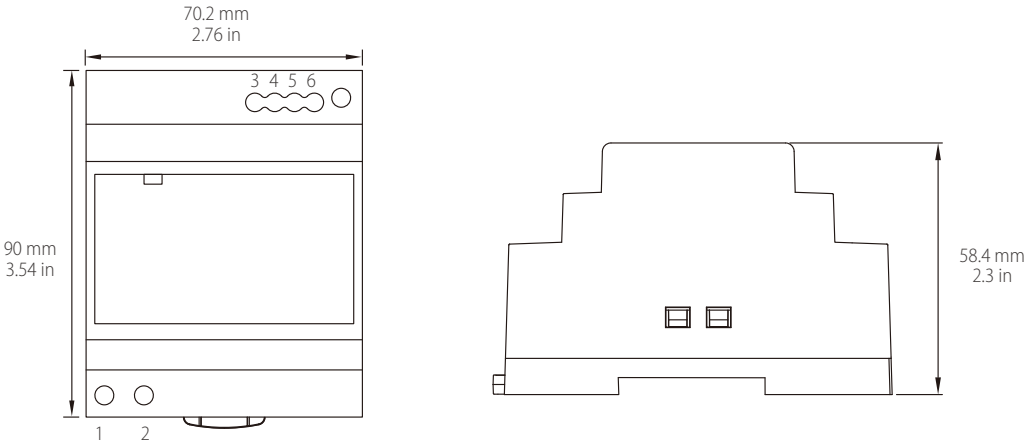
## Dimensions & Weight

<b>Length:</b>	90mm / 3.54in
<b>Width:</b>	70.2mm / 2.76in
<b>Height:</b>	58.4mm / 2.3in
<b>Weight:</b>	270g

## Packing

<b>Carton Size:</b>	420x 22 x 35 CM 15.75x 8.66 x 13.78 in
<b>Master Carton Quantities:</b>	50pcs / Carton

# Dimensions and Installation



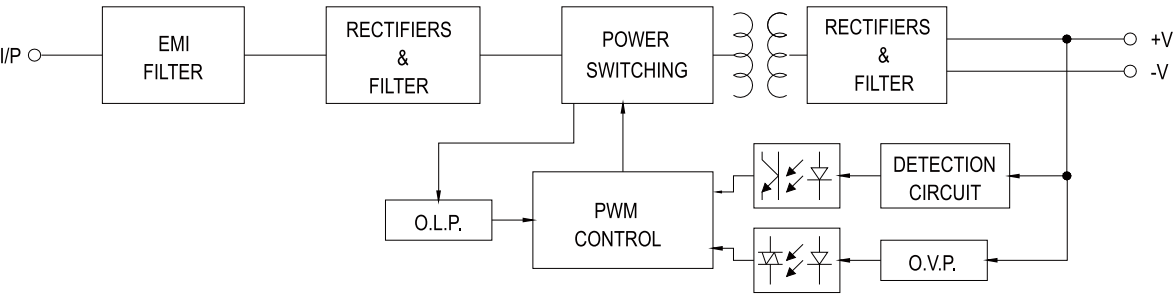
Input

No.	Description
1	AC/L
2	AC/N

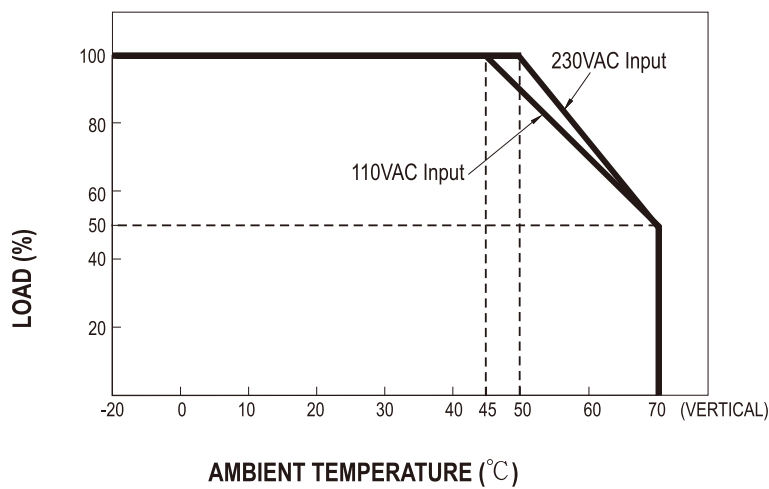
Output

No.	Description
3,4	-V
5,6	+V

# Functional Diagram



# Deduction Curve and Temperature



# Minus Output and Input Voltage Curves

