

# YSEP150 SERIES 150W



YSEP series are designed with lower profile housing and for wide range AC input from 90 VAC to 305V AC.

The series have build-in active function and operate for the temperature up to 70 °C .

The good performance can be used for industrial automation & control systems, varied equipments etc.



## Features



Universal AC Input/ Full Range



Built-in Active PFC Function



Built-in Remote ON-OFF Control



High Efficiency Up To 90%



Protection:Short Circuit/Overload/  
Over Voltage/Over Temperature



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER	VOLTAGE ADJ. RANGE
YSEP150-05030000	5V	30A	150W	4.75~5.5V
YSEP150-12012500	12V	12.5A	150W	11.4~13.2V
YSEP150-15010000	15V	10A	150W	14.3~16.5V
YSEP150-24006300	24V	6.3A	151.2W	22.8~26.4V
YSEP150-27005600	27V	5.6A	151.2W	25.7~29.7V
YSEP150-48003200	48V	3.2A	153.6W	45.6~52.8V

## Input

<b>VOLTAGE RANGE</b>	90-305VAC/127-430VDC
<b>FREQUENCY RANGE</b>	47-63Hz
<b>POWER FACTOR(Typ.)</b>	PF>0.93/230VAC at full load PF>0.98/115VAC at full load
<b>EFFICIENCY(Typ.)</b>	87% YSEP150-05030000 89% YSEP150-12012500 88.5% YSEP150-15010000 89% YSEP150-24006250 89.5% YSEP150-27005600 90% YSEP150-48003120
<b>AC CURRENT(Typ.)</b>	1.6A/115VAC 0.8A/230VAC
<b>INRUSH CURRENT(Typ.)</b>	COLD START 45A/230VAC
<b>LEAKAGE CURRENT</b>	<2mA/240VAC

## Output

<b>RIPPLE &amp; NOISE(max.)</b>	100mVp-p	YSEP150-05030000
	100mVp-p	YSEP150-12012500
	100mVp-p	YSEP150-15010000
	150mVp-p	YSEP150-24006250
	150mVp-p	YSEP150-27005600
	250mVp-p	YSEP150-48003120
<b>VOLTAGE TOLERANCE</b>	± 2.0%	
<b>LINE REGULATION</b>	± 0.5%	
<b>LOAD REGULATION</b>	± 1.0%	YSEP150-05030000
	± 0.5%	YSEP150-12012500
	± 0.5%	YSEP150-15010000
	± 0.5%	YSEP150-24006250
	± 0.5%	YSEP150-27005600
	± 0.5%	YSEP150-48003120
<b>SETUP, RISE TIME</b>	600ms, 30ms at full load	
<b>HOLD UP TIME(Typ.)</b>	16ms at full load	

## Protection

<b>OVER LOAD</b>	105%-135% Rated Output Power Protection type: Constant current limiting, recovers automatically after fault condition is removed.
<b>OVER VOLTAGE</b>	5V:5.75~ 6.75V 12V:13.2 ~ 16.2V 15V:16.5 ~ 20.25V 24V:26.4 ~ 32.4V 27V:29.7 ~ 36.45V 48V:52.8~ 64.8V
<b>OVER TEMPERATURE</b>	Protection type : Shut down o/p voltage, re-power on to recover. Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.

## Environment

<b>WORKING TEMP.</b>	-30 °C to +70 °C (Refer to "Derating Curve")
<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing
<b>STORAGE TEMP., HUMIDITY</b>	-40 °C to +85 °C , 10 ~ 95% RH non-condensing
<b>TEMP. COEFFICIENT</b>	± 0.05%/ °C (0~50 °C)
<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
<b>OVER VOLTAGE CATEGORY</b>	III; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters
<b>MTBF</b>	1915.82K hrs min. Telcordia SR-332 (Bellcore)

## Safety & EMC

<b>SAFETY STANDARDS</b>	BS EN/EN62368-1, BS EN/EN61558-1,BS EN/EN61558-2-16
<b>WITHSTAND VOLTAGE</b>	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25 °C / 70% RH
<b>EMC EMISSION</b>	Compliance to BS EN/EN55032 Class B, BS EN/EN61000-3-2,-3
<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035

## Function

<b>REMOTE CONTROL</b>	CN1: < 0~0.8VDC POWER ON , 4~10VDC POWER OFF
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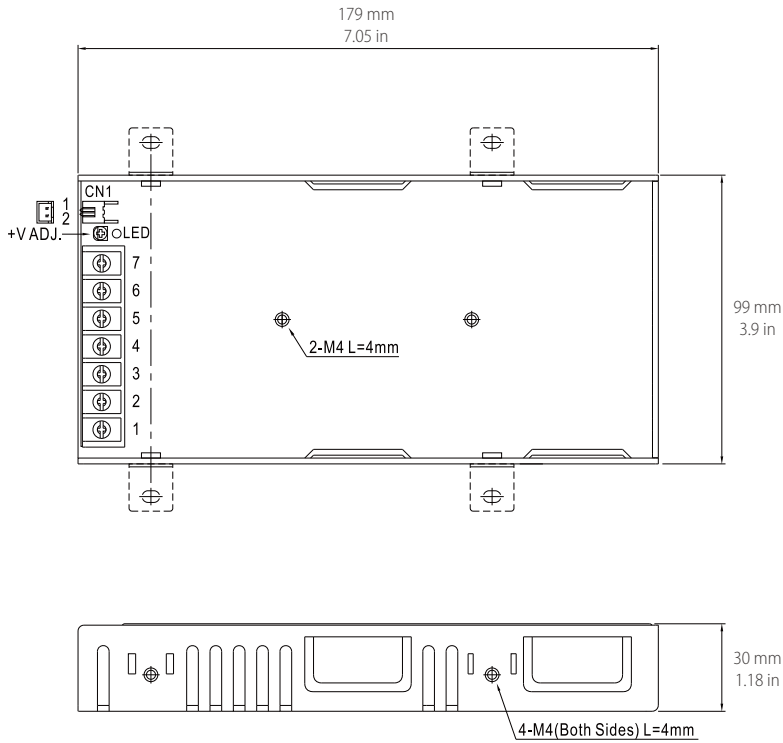
## Note

- 1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
- 4.Derating may be needed under low input voltages. Please check the derating curve for more details.
- 5.Strongly recommended that external output capacitance should not exceed 5000uF(Only for the models with output voltage 5/12V)
- 6.The ambient temperature derating of 3.5 °C/1000m with fanless models and of 5 °C/1000m with fan models for operating altitude higher than 2000m(6500ft).

## Dimensions & Weight

<b>Length:</b>	179mm / 7.05in
<b>Width:</b>	99mm / 3.9in
<b>Height:</b>	30mm / 1.18in
<b>Weight:</b>	150g

# Mechanical Specification



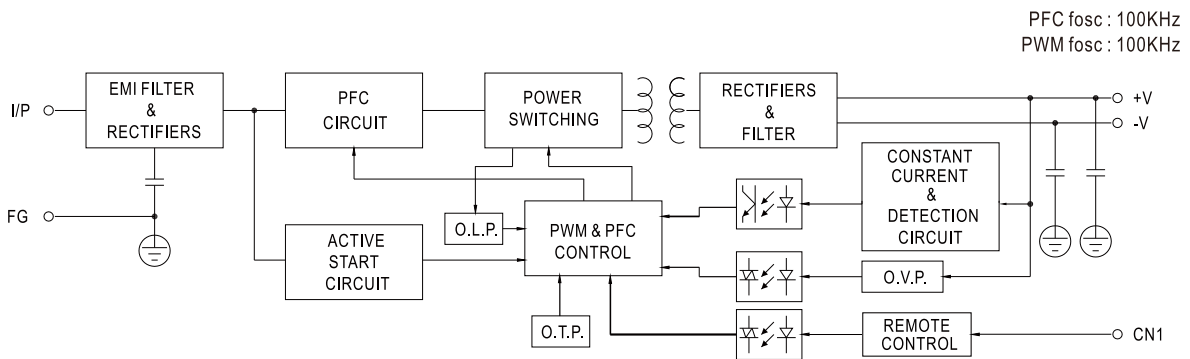
## Input

No.	Description
1	AC/L
2	AC/N
3	FG $\perp$

## Output

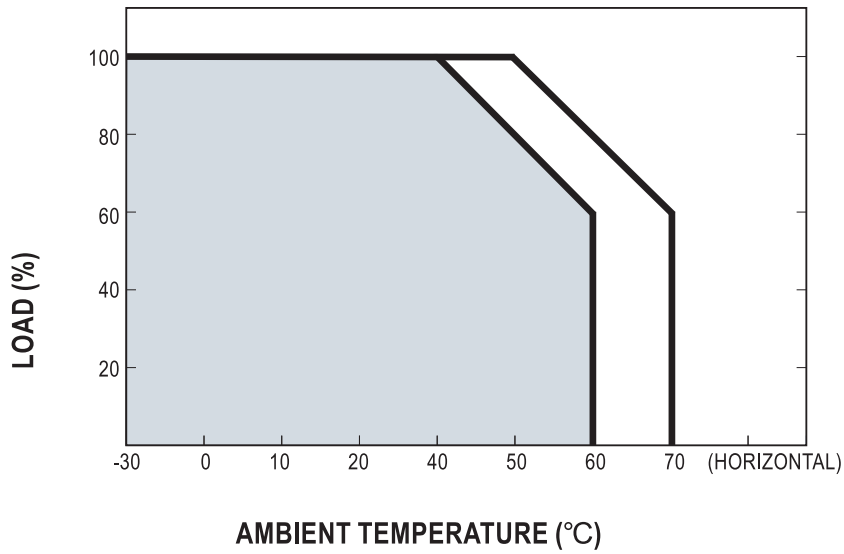
No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

# Block Diagram



## Deduction curve and temperature

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## Minus output and input voltage curves

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