

# YEP500 SERIES 500W



   RoHS

YEP 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
YEP500-5	5V	90A	450W	4.5~5.5V
YEP500-12	12V	41.7A	500.4W	10~13.2V
YEP500-15	15V	33.4A	501W	13.5~18V
YEP500-24	24V	21A	504W	20~26.4V
YEP500-48	48V	10.5A	504W	41~56V

## Input

VOLTAGE RANGE	90-305VAC/127-430VDC	
FREQUENCY RANGE	47-63Hz	
POWER FACTOR(Typ.)	PF>0.95/230VAC at full load PF>0.98/115VAC at full load	
EFFICIENCY(Typ.)	84%	YEP500-5
	88%	YEP500-12
	88%	YEP500-15
	89%	YEP500-24
	90.5%	YEP500-48
AC CURRENT(Typ.)	5.3A/115VAC	
	2.65A/230VAC	
INRUSH CURRENT(Typ.)	20A/115VAC	
	40A/230VAC	
LEAKAGE CURRENT	<2mA/240VAC	

## Output

<b>RIPPLE &amp; NOISE(max.)</b>	150mVp-p	
<b>VOLTAGE TOLERANCE</b>	± 2.0%	YEP500-5
	± 2.0%	YEP500-12
	± 2.0%	YEP500-15
	± 2.0%	YEP500-24
	± 2.0%	YEP500-48
<b>LINE REGULATION</b>	± 0.5%	YEP500-5
	± 0.3%	YEP500-12
	± 0.3%	YEP500-15
	± 0.2%	YEP500-24
	± 0.2%	YEP500-48
<b>LOAD REGULATION</b>	± 1.0%	YEP500-5
	± 0.5%	YEP500-12
	± 0.5%	YEP500-15
	± 0.5%	YEP500-24
	± 0.5%	YEP500-48
<b>SETUP, RISE TIME</b>	1500ms, 80ms/230VAC at full load	
	3000ms, 80ms/115VAC at full load	
<b>HOLD UP TIME(Typ.)</b>	18ms/230VAC at full load	
	14ms/115VAC at full load	

## Protection

OVER LOAD	105%-130% Rated Output Power Protection type: Constant current limiting recovers automatically after fault condition is removed.
OVER VOLTAGE	5V: 5.75~ 6.75V 12V: 13.8 ~ 16.2V 15V: 18.8 ~ 21.8V 24V: 27.6 ~ 32.4V 48V: 58.4~ 68V Protection type : Shut down o/p voltage, re-power on to recover.
OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down.

## Environment

WORKING TEMP.	-30 °C to +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 90% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 °C to +85 °C , 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/ °C (0~50 °C )
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
MTBF	1372.4K hrs min. Telcordia SR-332 (Bellcore)

## Function

REMOTE CONTROL	POWER ON:open or 0~0.8VDC between RC+(Pin 4)&RC-(Pin3) on CN100 POWER OFF: 4~10VDC between RC+(Pin 4)&RC-(Pin3) on CN100
REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.3V
FAN CONTROL(Typ.)	$RTH2 \geq 50^{\circ}\text{C} \pm 10^{\circ}\text{C}$ Fan on ; $RTH2 \leq 40^{\circ}\text{C} \pm 10^{\circ}\text{C}$ Fan off (Fan always on for 3.3~5V,Fan ON/OFF control for 12~48V)

## Safety & EMC

<b>SAFETY STANDARDS</b>	UL62368-1, TUV BS EN/EN62368-1 approved.
<b>WITHSTAND VOLTAGE</b>	I/P-O/P: 3KVAC 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 (CISPR32) 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.

## 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 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. Derating may be needed under low input voltages. Please check the derating curve for more details.
4. 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."
5. 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).

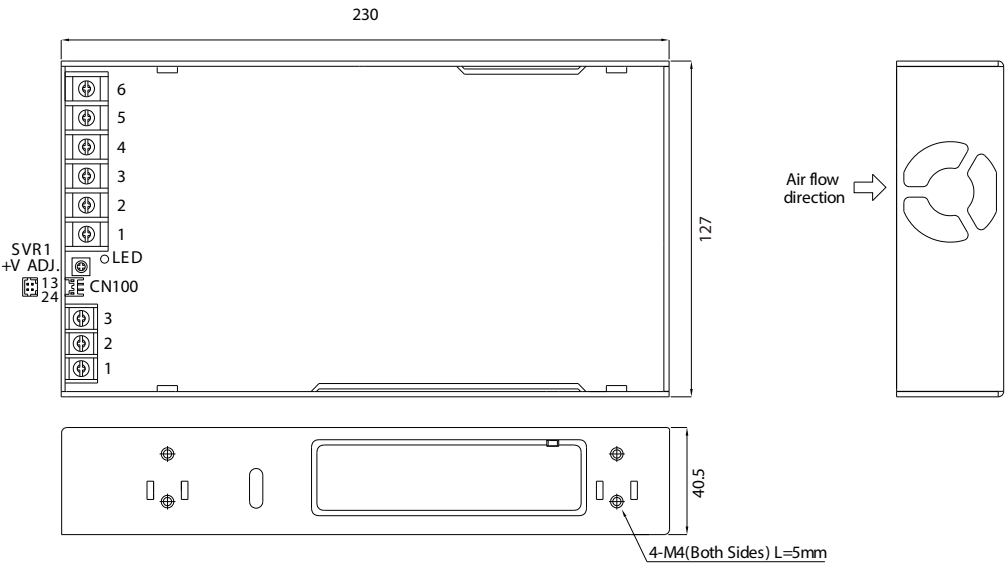
# Dimensions & Weight

Length:	230mm / 9.06 in
Width:	127mm / 5 in
Height:	40.5mm / 1.59 in
Weight:	1.3kg

# Packing

Carton Size:	54 x 30 x 24 CM 21.26 x 11.81 x 9.45 in
Master Carton Quantities:	9pcs / Carton

# Mechanical Specification

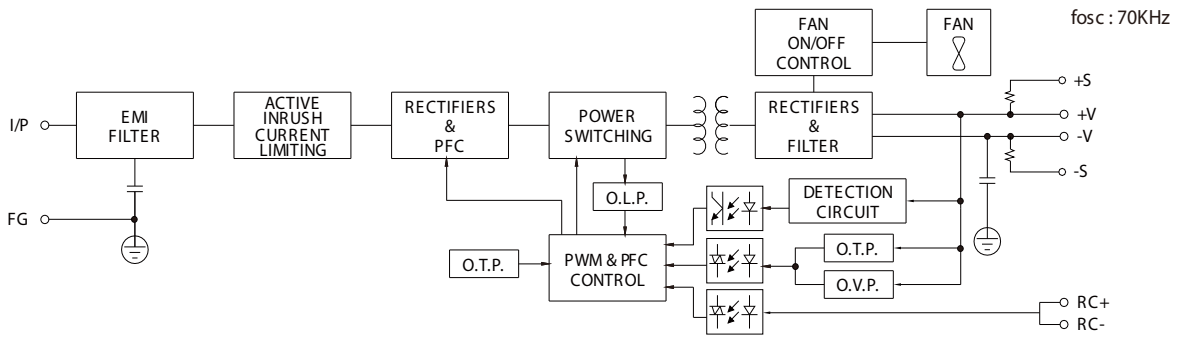


Input	
No.	Description
1	AC/L
2	AC/N
3	FG $\perp$

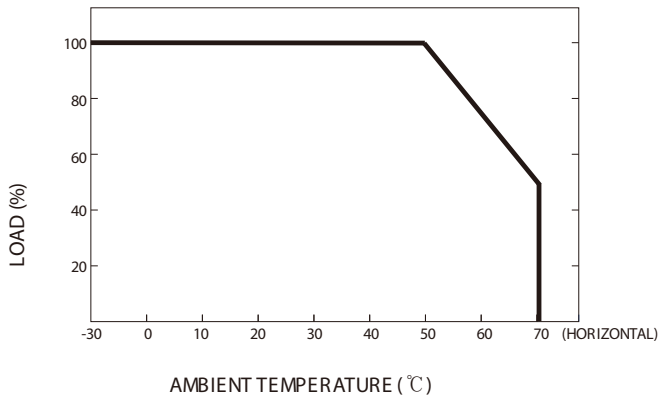
Output	
No.	Description
1~3	-V
4~6	+V

CN100		Mating Housing HRS DF11-4DS or equivalent	Terminal HRS DF11-**SC or equivalent
No.	Description		
1	-S		
2	+S		
3	RC-		
4	RC+		

## Block Diagram



## Derating Curve



## Static Characteristics

