

YEP150 SERIES 150W



الله CE LK 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 $^{\circ}$ 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
YSEP150-5	5V	30A	150W	4.75~5.5V
YSEP150-12	12V	12.5A	150W	11.4~13.2V
YSEP150-15	15V	10A	150W	14.3~16.5V
YSEP150-24	24V	6.3A	151.2W	22.8~26.4V
YSEP150-27	27V	5.6A	151.2W	25.7~29.7V
YSEP150-48	48V	3.2A	153.6W	45.6~52.8V

Input

VOLTAGE RANGE	90-305VAC/127-430VDC		
FREQUENCY RANGE	47-63Hz	47-63Hz	
POWER FACTOR(Typ.)	PF>0.93/	PF>0.93/230VAC at full load	
	PF>0.98/115VAC at full load		
EFFICIENCY(Typ.)	87%	YSEP150-5	
	89%	YSEP150-12	
	88.5%	YSEP150-15	
	89%	YSEP150-24	
	89.5%	YSEP150-27	
	90%	YSEP150-48	
AC CURRENT(Typ.)	1.6A/115VAC		
	0.8A/230	VAC	
INRUSH CURRENT(Typ.)	COLD START 45A/230VAC		
LEAKAGE CURRENT	<2mA/240VAC		

Output

RIPPLE & NOISE(max.)	100mVp-p	YEP150-5
	100mVp-p	YEP150-12
	100mVp-p	YEP150-15
	150mVp-p	YEP150-24
	150mVp-p	YEP150-27
	250mVp-p	YEP150-48
VOLTAGE TOLERANCE	± 2.0%	
LINE REGULATION	± 0.5%	
LOAD REGULATION	± 1.0%	YEP150-5
	$\pm 0.5\%$	YEP150-12
	± 0.5%	YEP150-15
	± 0.5%	YEP150-24
	$\pm 0.5\%$	YEP150-27
	± 0.5%	YEP150-48
SETUP, RISE TIME	600ms, 30ms	at full load
HOLD UP TIME(Typ.)	16ms at full lo	bac

Protection

OVER LOAD	105%-135% Rated Output Power
	Protection type: Constant current limiting, recovers automatically
	after fault condition is removed.
OVER VOLTAGE	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
OVER TEMPERATURE	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

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

Safety & EMC

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

Function

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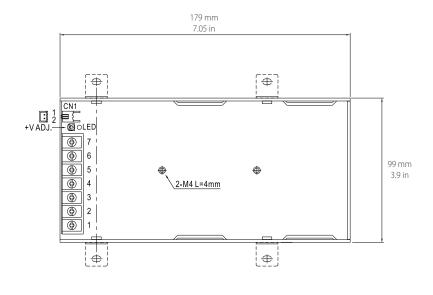
Note

- **1.** All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient tempera ture.
- **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).

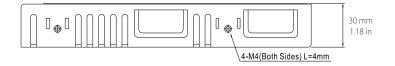
Dimensions & Weight

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

Mechanical Specification

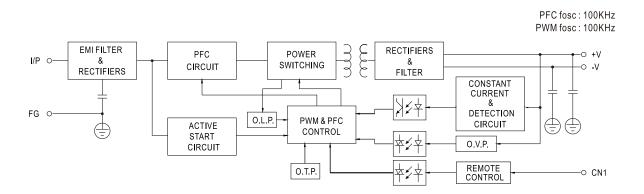


Input	
No.	Description
1	AC/L
2	AC/N
3	FG ±

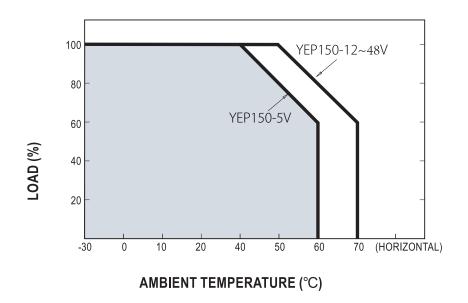


Output	
No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

Block Diagram



Deduction curve and temperature



Minus output and input voltage curves

