

# YSD20L SERIES 20W



Yingjiao's slimline power family are designed with slim plastic housing and for full range AC input from 90V AC TO 264V AC. The series are single phase PSU, providing DC OK relay contact and adjustable DC output voltage. They have high efficiency and operate in wide temperature range. The series can widely used for industrial automation & control systems, varied equipments etc.

   RoHS

## Features



Universal AC Input/ Full Range



Installation on DIN Rail TS-35/7.5 & 15



DC OK Signal Output



DC Output Voltage Adjustable



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



Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER
YSD20L-0503000	5V	3A	15W
YSD20L-1201670	12V	1.37A	20W
YSD20L-1501340	15V	1.34A	20W
YSD20L-2401000	24V	1A	24W
YSD20L-2400830	24V	0.83A	20W

## Input

VOLTAGE RANGE	85-264VAC/120-370VDC	
FREQUENCY RANGE	50/60Hz	
INRUSH CURRENT	35A/115VAC 70A/230VAC	
AC CURRENT	0.33A/115VAC 0.21A/230VAC	
LEAKAGE CURRENT	<0.25mA/240VAC	
EFFICIENCY	76%	YSD20L-0503000
	80%	YSD20L-1201670
	81%	YSD20L-1501340
	84%	YSD20L-2401000
	82%	YSD20L-2400830

## Output

RIPPLE & NOISE	80mVp-p	YSD20L-0503000
	120mVp-p	YSD20L-1201670
	120mVp-p	YSD20L-1501340
	150mVp-p	YSD20L-2401000
	150mVp-p	YSD20L-2400830
VOLTAGE TOLERANCE	± 5.0%	
LINE REGULATION	± 1.0%	
LOAD REGULATION	± 5.0%	
SETUP, RISE TIME	500ms, 30ms/230VAC at full load	
	1000ms, 30ms/115VAC at full load	

## Protection

<b>OVER LOAD</b>	>105%-150% Rated Output Power Protection type: Hiccup Mode- recovers automatically after fault condition is removed
<b>OVER VOLTAGE</b>	5V:5.75~ 6.75V 12V:13.8 ~ 16.2V 15V:17.25 ~ 20.25V 24V:27.6 ~ 32.4V Protection type : Shut down o/p voltage, re-power on to recover
<b>OVER TEMPERATURE</b>	Shut down o/p voltage, re-power on to recover
<b>OVER CURRENT</b>	110%-180%

## Environment

<b>OPERATING TEMPERATURE</b>	-20 °C to 60 °C , Full Load, Normal Operation
<b>STORAGE TEMP</b>	-40 °C to 85 °C
<b>STORAGE HUMIDITY</b>	10 ~ 95% RH
<b>WORKING HUMIDITY</b>	20% ~ 95% RH Non-Condensing
<b>MTBF</b>	200,000 Hours Minimum at Full Load at 25 °C Ambient

## SAFETY & EMC

<b>SAFETY REGULATIONS</b>	UL508, UL1310 , BS/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), BS EN/EN61204-3 Class B, BS EN/EN61000- 3-2,-3, EAC TP TC 020, CNS13438 Class B

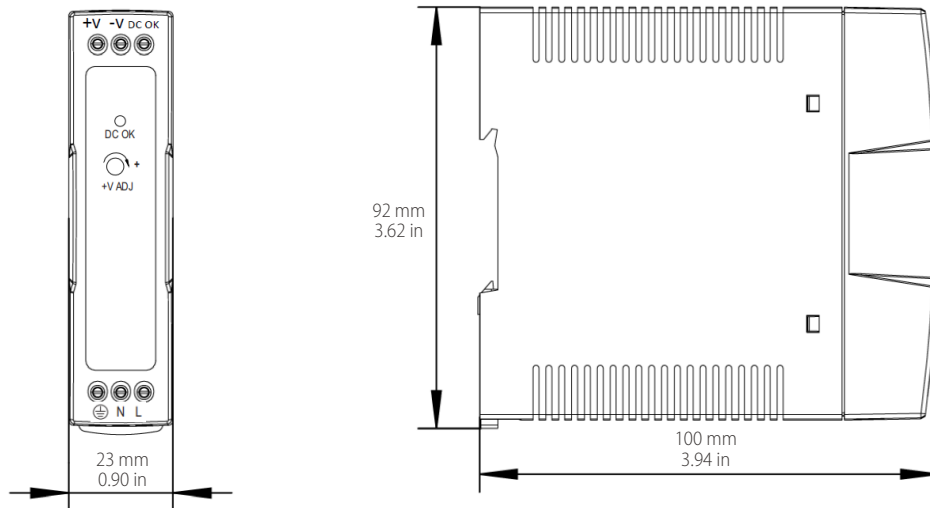
## Dimensions & Weight

Length:	23mm / 0.91in
Width:	100mm / 3.94in
Height:	92mm / 3.62in
Weight:	150g

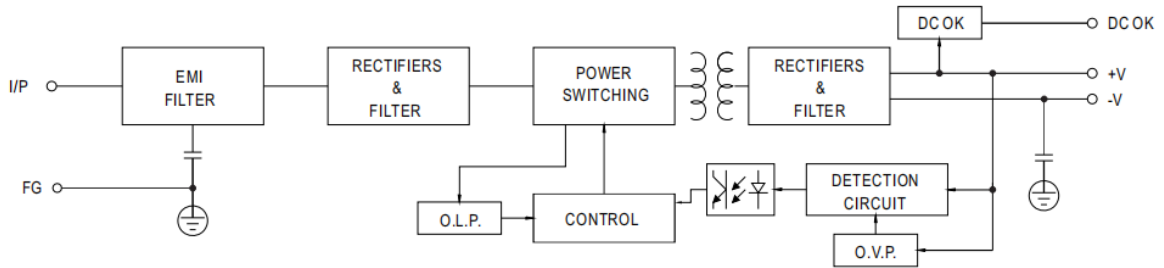
## Packing

Carton Size:	54 x 30 x 24 CM 21.26 x 11.81 x 9.45 in
Master Carton Quantities:	100pcs / Carton

## Dimensions and Installation

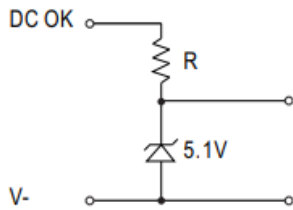


# Functional Diagram



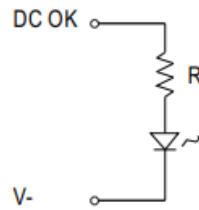
## Application of DC OK Active Signal

(a) 5V signal



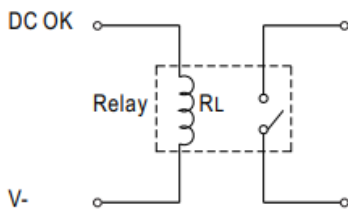
Model	R
5V	$\geq 200\ \Omega$
12V	$\geq 1.5K\ \Omega$
15V	$\geq 2K\ \Omega$
24V	$\geq 3.9K\ \Omega$

(b) LED



Model	R
5V	$\geq 1K\ \Omega$
12V	$\geq 2.4K\ \Omega$
15V	$\geq 3K\ \Omega$
24V	$\geq 4.7K\ \Omega$

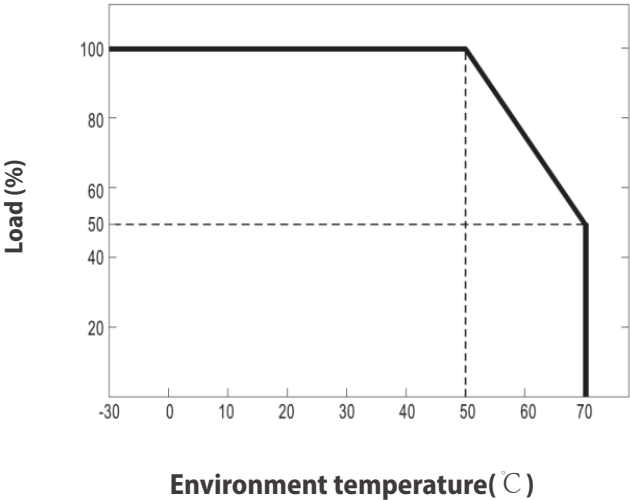
(c) Relay



Model	RL
5V	$\geq 120\ \Omega$
12V	$\geq 700\ \Omega$
15V	$\geq 700\ \Omega$
24V	$\geq 1.2K\ \Omega$

# Deduction curve and temperature

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# Minus output and input voltage curves

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