

# YSD20L SERIES 10W



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
-  DC OK Signal Output
-  Protection: Short Circuit/Overload/ Over Voltage/Over Temperature
-  Installation On DIN Rail TS-35/7.5 & 15
-  DC Output Voltage Adjustable
-  Three Years Warranty

## Model Information

Yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER
YSD20L-0502000	5V	2A	10W
YSD20L-1200840	12V	0.84A	10W
YSD20L-1500670	15V	0.67A	10W
YSD20L-2400420	24V	0.42A	10W

## Input

VOLTAGE RANGE	90-264VAC/127-370VDC	
FREQUENCY RANGE	47~ 63Hz	
INRUSH CURRENT	35A/115VAC cold start 70A/230VAC cold start	
AC CURRENT	0.33A/115VAC 0.21A/230VAC	
LEAKAGE CURRENT	<1mA/240VAC	
EFFICIENCY	77%	YSD20L-0502000
	81%	YSD20L-1200840
	81%	YSD20L-1500670
	84%	YSD20L-2400420

## Output

RIPPLE & NOISE	80mVp-p	YSD20L-0502000
	120mVp-p	YSD20L-1200840
	120mVp-p	YSD20L-1500670
	150mVp-p	YSD20L-2400420
VOLTAGE ADJ. RANGE	4.75~5.5V	YSD20L-0502000
	10.8 ~ 13.2V	YSD20L-1200840
	13.5 ~ 16.5V	YSD20L-1500670
	21.6 ~ 26.4V	YSD20L-2400420

## Output

VOLTAGE TOLERANCE	± 2.0%
LINE REGULATION	± 1.0%
LOAD REGULATION	± 5.0%
SETUP, RISE TIME	500ms, 30ms/230VAC at full load 1000ms, 30ms/115VAC at full load
HOLD UP TIME (Typ.)	120ms/230VAC at full load 25ms/115VAC at full load

## Protection

OVER LOAD	Above 105% Rated Output Power Protection type: Hiccup Mode- recovers automatically after fault condition is removed
OVER VOLTAGE	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

## Environment

OPERATING TEMPERATURE	-20 °C to 70 °C (Refer to "Derating Curve")
STORAGE TEMP	-40 °C to 85 °C
STORAGE HUMIDITY	10 ~ 95% RH
WORKING HUMIDITY	20% ~ 90% RH Non-Condensing
MTBF	2834.5K hrs min. Telcordia SR-332 (Bellcore)

## SAFETY & EMC

SAFETY REGULATIONS	UL508, UL1310 , BS/EN62368-1 approved
WITHSTAND VOLTAGE	I/P-O/P:3KVAC 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 °C / 70% RH
EMC EMISSION	BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3
EMC IMMUNITY	BS EN/EN61000-4-2,3,4,5,6,8,11

## Dimensions & Weight

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Length:	23mm / 0.91in
Width:	100mm / 3.94in
Height:	92mm / 3.62in
Weight:	140g

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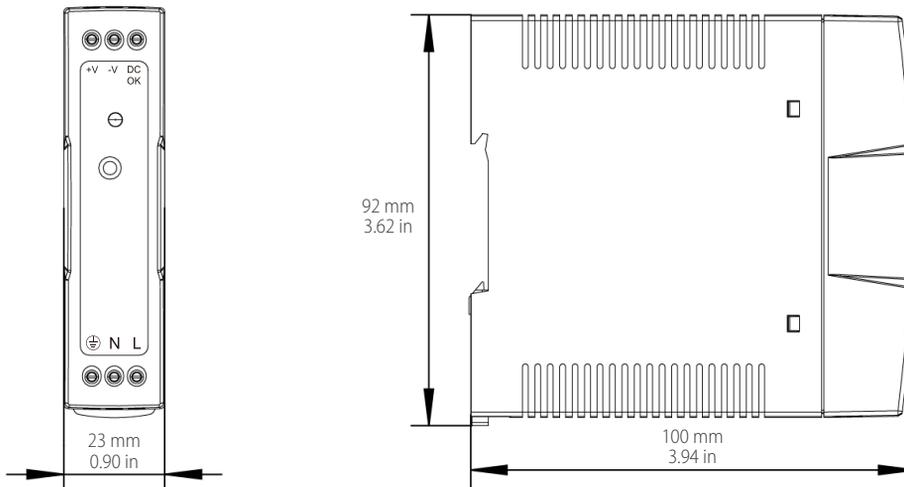
## Packing

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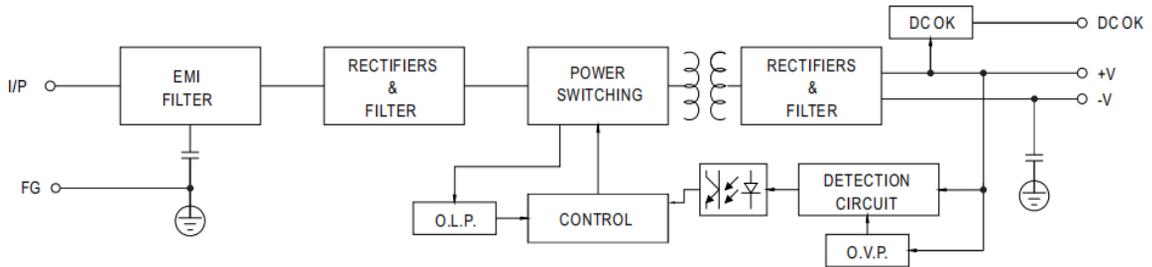
Carton Size:	54 x 30 x 24 CM 21.26 x 11.81 x 9.45 in
Master Carton Quantities:	100pcs / Carton

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## Dimensions and Installation

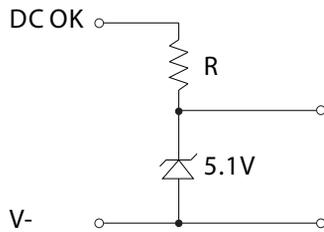


# Functional Diagram



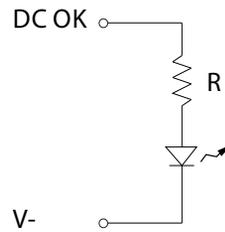
## Application Of DC OK Active Signal

(a) 5V signal



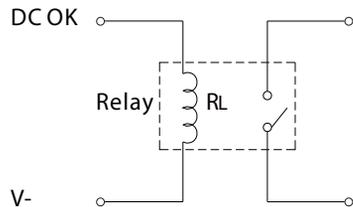
Model	R
5V	$\cong 200\Omega$
12V	$\cong 1.5K\Omega$
15V	$\cong 2K\Omega$
24V	$\cong 3.9K\Omega$

(b) LED



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

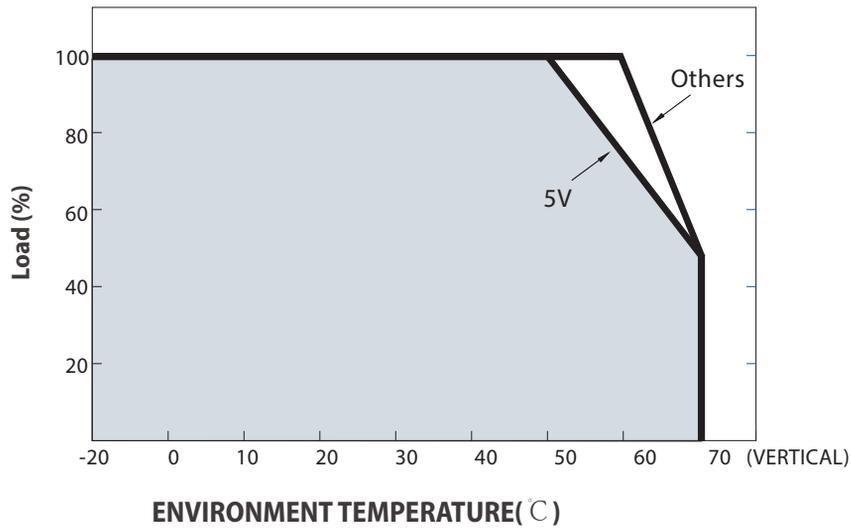
(c) Relay



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

## Deduction Curve and Temperature

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## Minus Output and Input Voltage Curves

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