

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.

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-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	$\pm 2.0\%$	
LINE REGULATION	$\pm 1.0\%$	
LOAD REGULATION	$\pm 5.0\%$	
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	

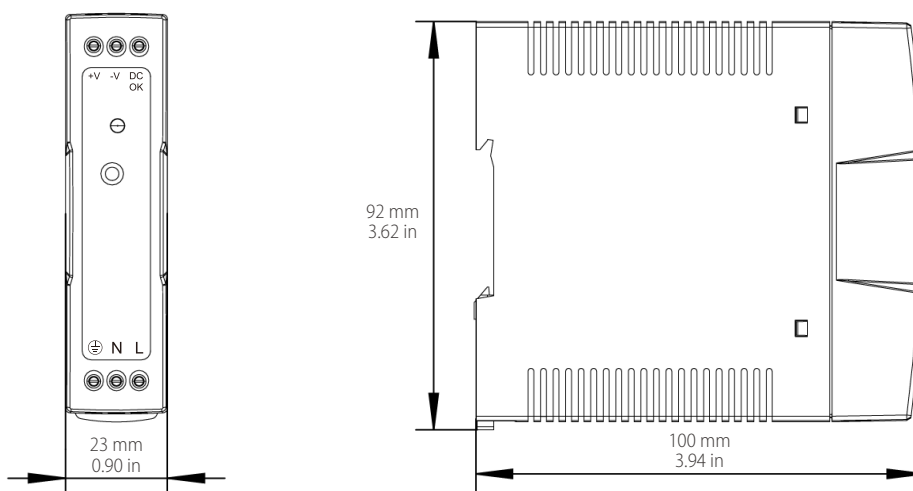
Dimensions & Weight

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

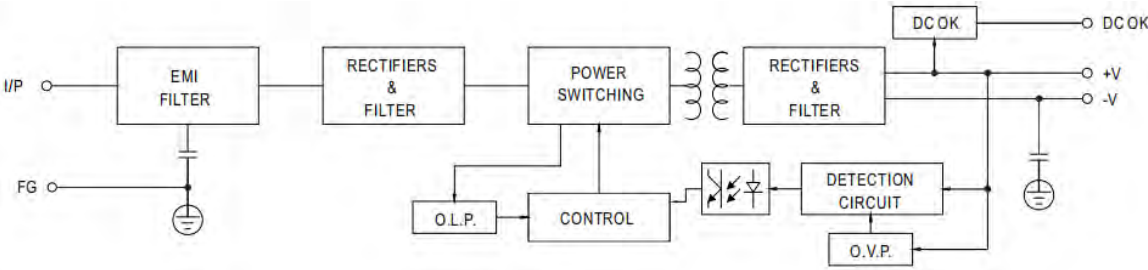
Packing

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

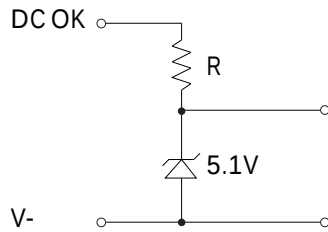


Functional Diagram



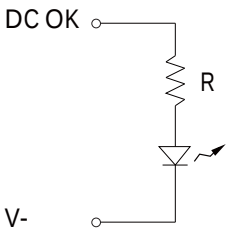
Application Of DC OK Active Signal

(a) 5V signal



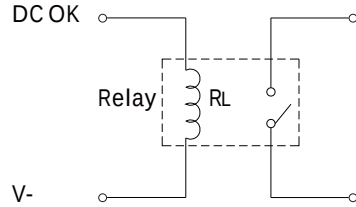
Model	R
5V	$\geq 200\Omega$
12V	$\geq 1.5K\Omega$
15V	$\geq 2K\Omega$
24V	$\geq 3.9K\Omega$

(b) LED



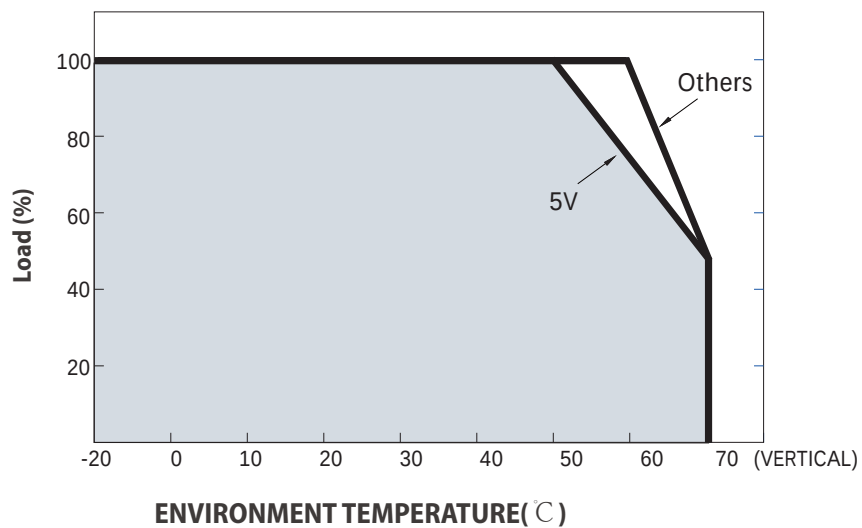
Model	R
5V	$\geq 1K\Omega$
12V	$\geq 2.4K\Omega$
15V	$\geq 3K\Omega$
24V	$\geq 4.7K\Omega$

(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



Minus Output and Input Voltage Curves

