

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	1.67A	20W
YSD20L-1501340	15V	1.34A	20W
YSD20L-2401000	24V	1A	24W

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	76%	YSD20L-0503000
	80%	YSD20L-1201670
	81%	YSD20L-1501340
	84%	YSD20L-2401000

Output

RIPPLE & NOISE	80mVp-p	YSD20L-0503000
	120mVp-p	YSD20L-1201670
	120mVp-p	YSD20L-1501340
	150mVp-p	YSD20L-2401000
VOLTAGE ADJ. RANGE	4.75~5.5V	YSD20L-0503000
	10.8 ~ 13.2V	YSD20L-1201670
	13.5 ~ 16.5V	YSD20L-1501340
	21.6 ~ 26.4V	YSD20L-2401000

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.)	50ms/230VAC at full load 20ms/115VAC at full load

Protection

OVER LOAD	105%-150% 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	2363.7K 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

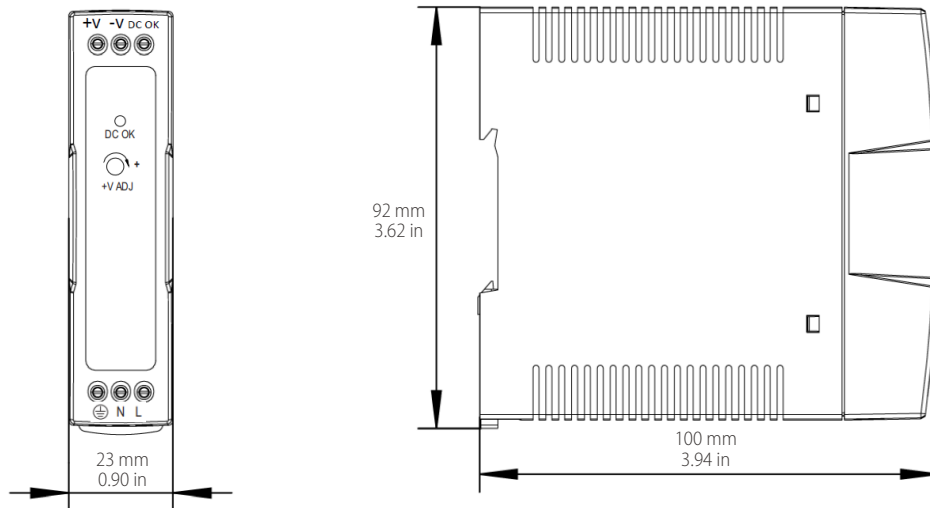
Dimensions & Weight

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

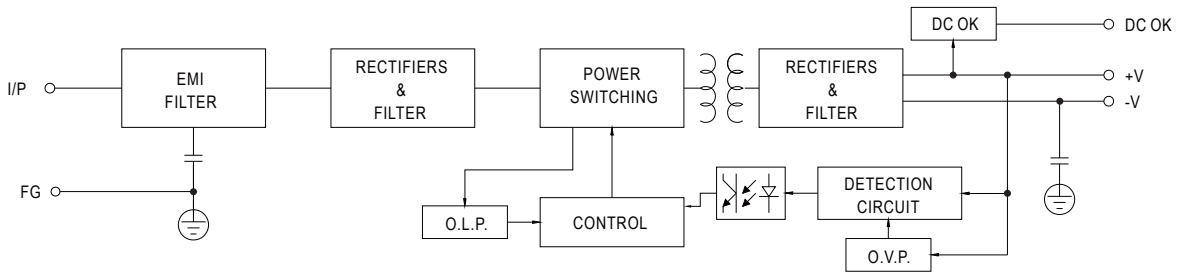
Packing

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

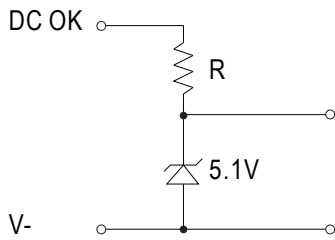


Functional Diagram



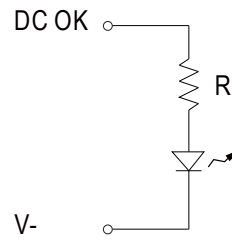
Application of DC OK Active Signal

(a) 5V signal



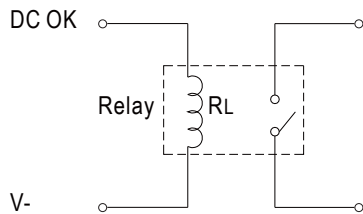
Model	R
5V	$\cong 200\Omega$
12V	$\cong 1.5K\Omega$
15V	$\cong 2K\Omega$
24V	$\cong 3.9K\Omega$

(b) LED



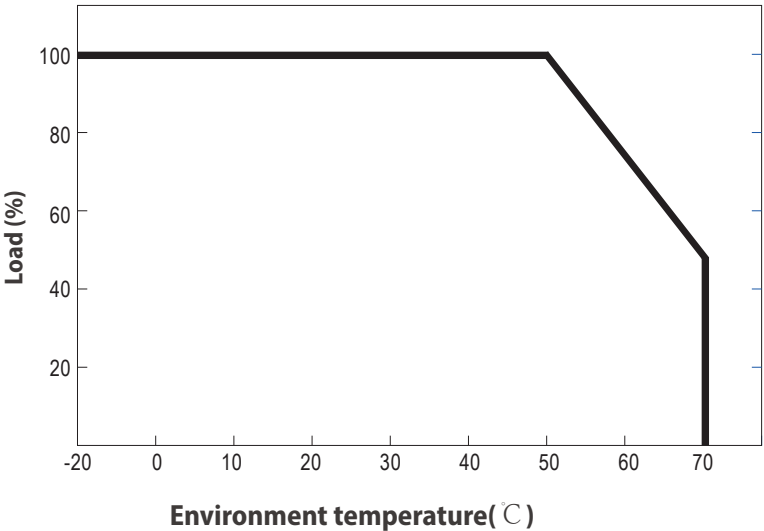
Model	R
5V	$\cong 1K\Omega$
12V	$\cong 2.4K\Omega$
15V	$\cong 3K\Omega$
24V	$\cong 4.7K\Omega$

(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



Minus output and input voltage curves

