

# YSD30S SERIES 30W



Yingjiao's step shape power family are designed with ultra-slim plastic housing and for full range AC input from 90V AC to 264V AC.

The series are isolation Class II Level, achieving high efficiency and low no-load power consumption. They provide adjustable DC output voltage and operate in wide temperature range.

The good performance can be used for building automation, household and industrial control systems etc.

## Features



Isolation Class II



Class 2/Pass LPS



Ultra Slim Step Shape



DC Output Voltage Adjustable



Protection: Short Circuit/Overload/  
Over Voltage



Over Voltage Category II



Three Years Warranty

## Model Information

| Yingjiao<br>Part number | DC<br>VOLTAGE | RATED<br>CURRENT | RATED<br>POWER |
|-------------------------|---------------|------------------|----------------|
| YSD30S-0503000          | 5V            | 3A               | 15W            |
| YSD30S-1202000          | 12V           | 2A               | 24W            |
| YSD30S-1502000          | 15V           | 2A               | 30W            |
| YSD30S-2401500          | 24V           | 1.5A             | 36W            |
| YSD30S-4800630          | 48V           | 0.63A            | 30W            |

## Input

|                 |                                  |                |
|-----------------|----------------------------------|----------------|
| VOLTAGE RANGE   | 90 ~ 264VAC<br>127 ~ 370VDC      |                |
| FREQUENCY RANGE | 47 ~ 63Hz                        |                |
| INRUSH CURRENT  | COLD START 25A/115VAC 45A/230VAC |                |
| AC CURRENT      | 0.88A/115VAC<br>0.48A/230VAC     |                |
| EFFICIENCY      | 82%                              | YSD30S-0503000 |
|                 | 88%                              | YSD30S-1202000 |
|                 | 89%                              | YSD30S-1502000 |
|                 | 89%                              | YSD30S-2401500 |
|                 | 90%                              | YSD30S-4800630 |

## Output

|                     |                                 |                |
|---------------------|---------------------------------|----------------|
| RIPPLE & NOISE      | 80mVp-p                         | YSD30S-0503000 |
|                     | 120mVp-p                        | YSD30S-1202000 |
|                     | 120mVp-p                        | YSD30S-1502000 |
|                     | 150mVp-p                        | YSD30S-2401500 |
|                     | 240mVp-p                        | YSD30S-4800630 |
| VOLTAGE ADJ. RANGE  | 4.5 ~ 5.5V                      | YSD30S-0503000 |
|                     | 10.8 ~ 13.8V                    | YSD30S-1202000 |
|                     | 13.5 ~ 18V                      | YSD30S-1502000 |
|                     | 21.6 ~ 29V                      | YSD30S-2401500 |
|                     | 43.2 ~ 55.2V                    | YSD30S-4800630 |
| VOLTAGE TOLERANCE   | ± 2.0%                          | YSD30S-0503000 |
|                     | ± 2.0%                          | YSD30S-1202000 |
|                     | ± 2.0%                          | YSD30S-1502000 |
|                     | ± 2.0%                          | YSD30S-2401500 |
|                     | ± 2.0%                          | YSD30S-4800630 |
| LINE REGULATION     | ± 1.0%                          |                |
| LOAD REGULATION     | ± 1.0%                          |                |
| SETUP, RISE TIME    | 500ms, 50ms/230VAC at full load |                |
|                     | 500ms, 50ms/115VAC at full load |                |
| HOLD UP TIME (Typ.) | 30ms/230VAC at full load        |                |
|                     | 12ms/115VAC at full load        |                |

## Protection

|                                                                 |                                                                                                                                                                                                                                                            |                |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| OVER LOAD                                                       | 105 ~ 160% rated output power<br>Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed<br>Constant current limiting within 50%-100% rated output voltage, recovers automatically after fault condition is removed. |                |
| OVER VOLTAGE                                                    | 5.75 ~ 7.5V                                                                                                                                                                                                                                                | YSD30S-0503000 |
|                                                                 | 15 ~ 18V                                                                                                                                                                                                                                                   | YSD30S-1202000 |
|                                                                 | 18.8 ~ 22.5V                                                                                                                                                                                                                                               | YSD30S-1502000 |
|                                                                 | 30 ~ 36V                                                                                                                                                                                                                                                   | YSD30S-2401500 |
|                                                                 | 57.6~ 67.2V                                                                                                                                                                                                                                                | YSD30S-4800630 |
| Protection type : Shut down o/p voltage, re-power on to recover |                                                                                                                                                                                                                                                            |                |

## Environment

|                         |                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------|
| WORKING TEMP.           | — 20 °C ~ +70 °C                                                                                              |
| Working Humidity        | 20 ~ 90% RH Non-Condensing                                                                                    |
| STORAGE TEMP., HUMIDITY | — 40 °C ~ +85 °C , 10 ~ 95% RH non-condensing                                                                 |
| TEMP. COEFFICIENT       | ± 0.03%/°C (0 ~ 50 °C ) RH non-condensing                                                                     |
| VIBRATION               | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 |
| OPERATING ALTITUDE      | 5000 meters                                                                                                   |
| OVER VOLTAGE CATEGORY   | II;According to EN62368-1;altitude up to 2000 meters                                                          |

## SAFETY & EMC

|                       |                                                  |
|-----------------------|--------------------------------------------------|
| SAFETY REGULATIONS    | UL62368-1, BS EN/EN62368-1                       |
| WITHSTAND VOLTAGE     | I/P-O/P:4KVAC                                    |
| INSULATION RESISTANCE | I/P-O/P: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                   |

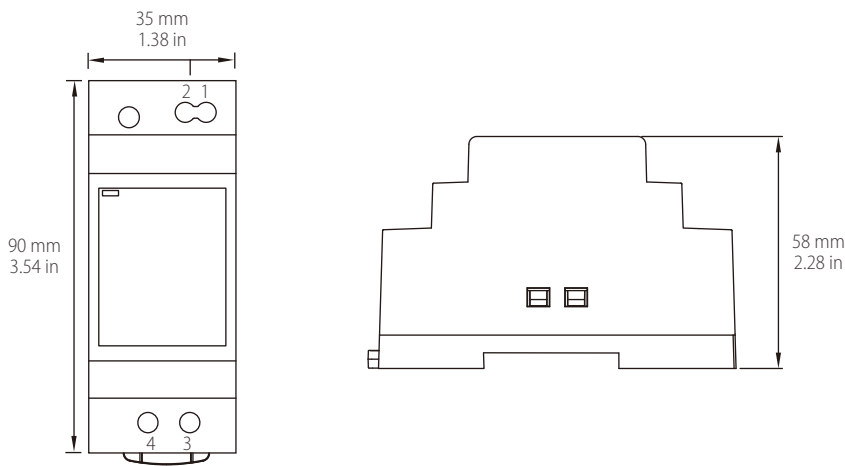
## Dimensions & Weight

|         |               |
|---------|---------------|
| Length: | 35mm / 1.38in |
| Width:  | 90mm / 3.54in |
| Height: | 58mm / 2.28in |
| Weight: | 120g          |

## Packing

|                           |                                           |
|---------------------------|-------------------------------------------|
| Carton Size:              | 37 x 22 x 25 CM<br>14.57 x 8.66 x 9.84 in |
| Master Carton Quantities: | 50pcs / Carton                            |

## Dimensions and Installation



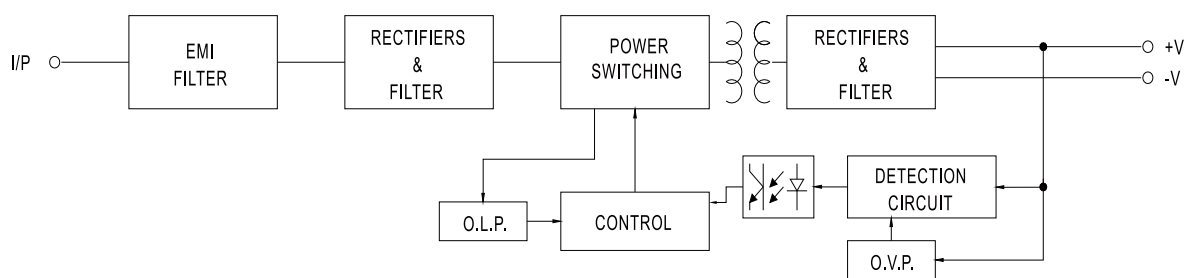
Input

| No. | Description |
|-----|-------------|
| 1   | +V          |
| 2   | -V          |

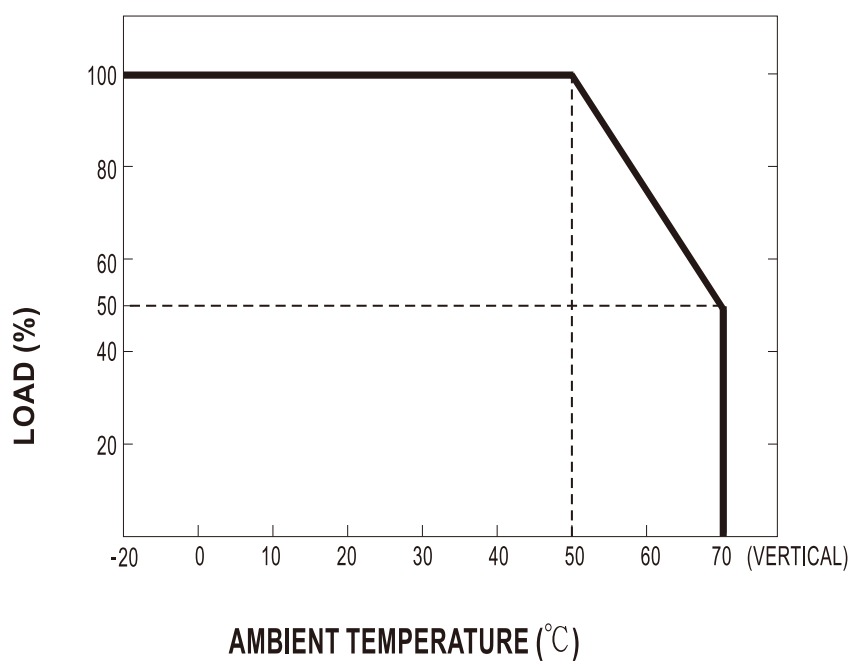
Output

| No. | Description |
|-----|-------------|
| 3   | AC/L        |
| 4   | AC/N        |

## Functional Diagram



## Deduction Curve and Temperature



## Minus Output and Input Voltage Curves

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