

# DPSD15S SERIES | STEP SHAPE

15W DIN Rail AC-DC Power Supply

MODEL: DPSD15S | CATEGORY: AC-DC | RATED POWER: 15W | FORM: DIN Rail

## PRODUCT OVERVIEW



### Key Product Features

- Ultra-slim DIN rail design
- Wide input: 90–264VAC / 127–370VDC
- Adjustable DC output voltage
- High efficiency, low no-load power
- Class II isolation
- Built-in protections (short circuit, overload, overvoltage)
- Wide operating temperature range

## PRODUCT DESCRIPTION

The DPSD15S Series is a compact 15W DIN rail power supply designed for space-constrained applications. It offers wide input voltage, adjustable output, and reliable performance with low power consumption for industrial and building automation systems.

## SAFETY CERTIFICATES

- Certified to UL61010-1 and UL61010-2-201
- Class II isolation design (no protective earth required)
- Meets EN55032 Class B emission requirements
- Complies with EN61000-3-2/-3 harmonic and voltage standards
- Meets EN61000-4 series immunity standards
- Designed for industrial EMC environments (EN61000-6-2)
- Class 2 / LPS (Limited Power Source) compliant



## Applications

- |  |  |
|--|--|
|  Building automation systems     |  PLC and I/O modules                        |
|  Smart home and lighting control |  Security and monitoring systems            |
|  Industrial control panels       |  Low-power distributed control applications |

# ELECTRICAL SPECIFICATIONS

## Model Information

Model Number	DC Voltage	Rated Current	Rated Power
DPSD15S-5	5V	2.4A	12W
DPSD15S-12	12V	1.25A	15W
DPSD15S-15	15V	1A	15W
DPSD15S-24	24V	0.63A	15W
DPSD15S-48	48V	0.31A	15W

## Input Specifications

Parameter	Value	
Voltage Range	90 ~ 264VAC / 127 ~ 370VDC	
Frequency Range	47 ~ 63Hz	
Inrush Current	Cold Start 25A/115VAC 45A/230VAC	
AC Current	0.5A/115VAC; 0.25A/230VAC	
Efficiency	80%	DPSD15S-5
	85%	DPSD15S-12
	85.5%	DPSD15S-15
	86%	DPSD15S-24
	87%	DPSD15S-48

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# ELECTRICAL SPECIFICATIONS

## Output Specifications

Parameter	Value	Model
Ripple & Noise	80mVp-p	DPSD15S-5
	120mVp-p	DPSD15S-12
	120mVp-p	DPSD15S-15
	150mVp-p	DPSD15S-24
	240mVp-p	DPSD15S-48
Voltage Adj. Range	4.5 ~ 5.5V	DPSD15S-5
	10.8 ~ 13.8V	DPSD15S-12
	13.5 ~ 18V	DPSD15S-15
	21.6 ~ 29V	DPSD15S-24
	43.2 ~ 55.2V	DPSD15S-48
Voltage Tolerance	±2.0%	DPSD15S-5
	±2.0%	DPSD15S-12
	±2.0%	DPSD15S-15
	±2.0%	DPSD15S-24
	±2.0%	DPSD15S-48
Line Regulation	±1.0%	
Load Regulation	±1.0%	
Setup, Rise Time	2000ms, 80ms/230VAC at full load	
	2000ms, 80ms/115VAC at full load	
Hold Up Time	30ms/230VAC at full load	
	12ms/115VAC at full load	

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# ELECTRICAL SPECIFICATIONS

## Protection

Parameter	Value	
Over Load	110 ~ 145% rated output power	
	Hiccup mode, auto recovery after fault removal	
	Constant current limiting, auto recovery	
Over Voltage	5.75 ~ 6.75V	DPSD15S-5
	14.2 ~ 16.2V	DPSD15S-12
	18.8 ~ 22.5V	DPSD15S-15
	30 ~ 36V	DPSD15S-24
	56.5 ~ 64.8V	DPSD15S-48
Protection Type	Shut off o/p voltage, clamping by zener diode	

## Environment

Parameter	Value
Working Temp.	-20°C ~ +70°C
Working Humidity	20 ~ 90% RH non-condensing
Storage Temp.	-40°C ~ +85°C
Storage Humidity	10 ~ 95% RH non-condensing
Temp. Coefficient	±0.03%/°C (0 ~ 50°C)
Vibration	10 ~ 500Hz, 2G 10min/1cycle, 60min each axis
Operating Altitude	5000 meters
Over Voltage Category	II (EN62368-1, up to 2000m)
MTBF	1000K hrs min. MIL-HDBK-217F (25°C)

## Safety&EMC

Parameter	Value
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	EN55032 Class B, EN/IEC 61000-3-2,3
EMC Immunity	EN61000-4-2,3,4,5,6,8,11

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# ELECTRICAL SPECIFICATIONS

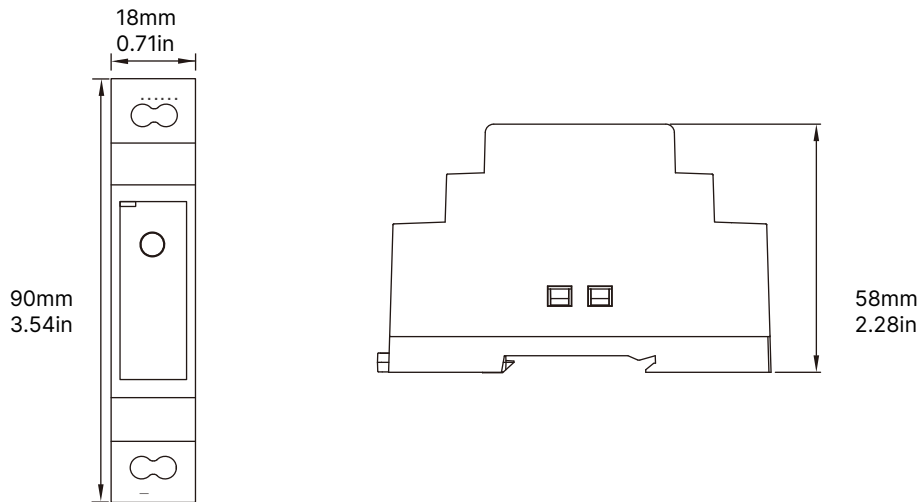
## Dimensions and Weight

Parameter	Value
Length	18mm / 0.71in
Width	90mm / 3.54in
Height	58mm / 2.28in
Weight	78g

## Packing

Parameter	Value
Carton Size	33.5 × 25.5 × 21 CM (13.19 × 10.04 × 8.27 in)
Master Carton Quantities	100 pcs / Carton

## Dimensions and Installation



### Input

No.	Description
1	+V
2	-V

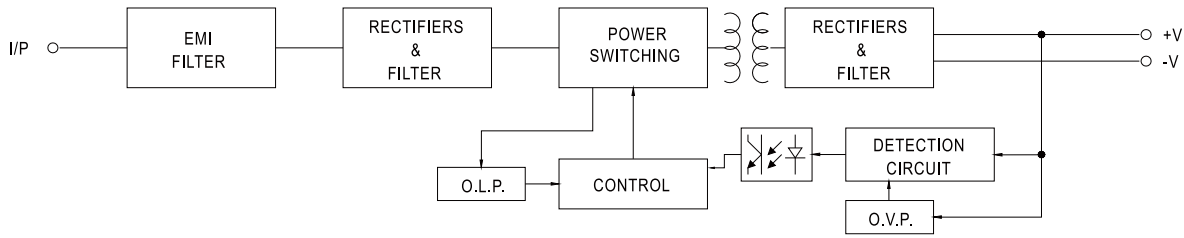
### Output

No.	Description
3	AC/N
4	AC/L

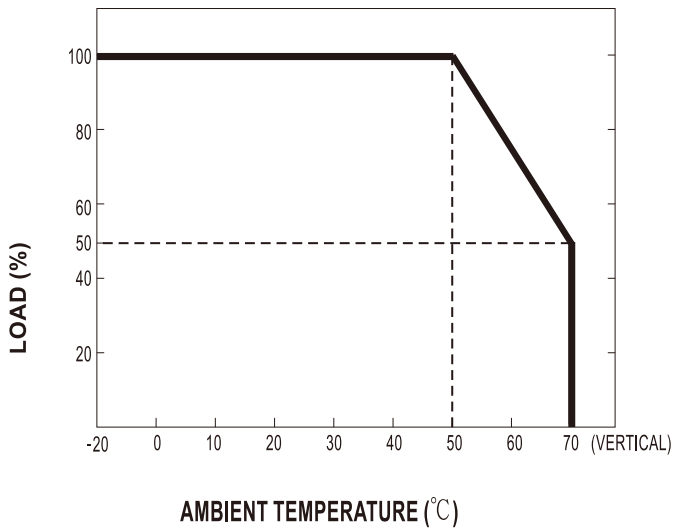
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# MECHANICAL SPECIFICATIONS

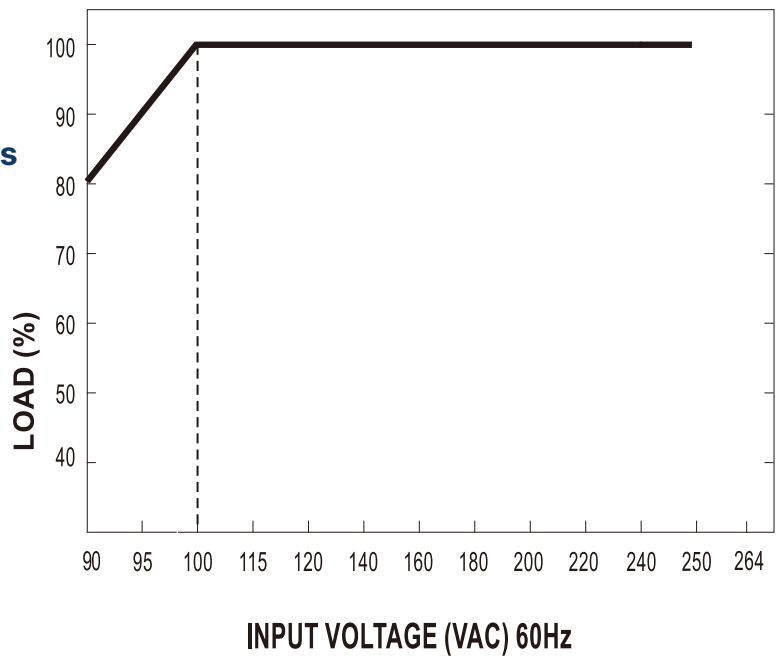
## Block Diagram



## Deduction Curve and Temperature



## Minus Output and Input Voltage Curves



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