

Features

- Universal Input 90~264V AC
- High-Efficiency
- Ultra Slim Step Line
- Protection: OLP, OVP
- Class II Isolation
- 3 years warranty



Ideal Power's 56YSD30S-xy 30W DIN Rail Mount AC/DC Power Supply Converter Series are certified to cURus, CE, RoHS & IEC/UL/EN62368-1 Standards and comply with (EU) 2019/1782, Level VI Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

Models

| Model Number | Output Voltage (V DC) | Output Current (A) | Output Power (W) | Efficiency (%) | Ripple & Noise (mVp-p) |
|------------------|-----------------------|--------------------|------------------|----------------|------------------------|
| 56YSD30S-0503000 | 5 | 3 | 15 | 82 | 80 |
| 56YSD30S-1203000 | 12 | 3 | 36 | 88 | 120 |
| 56YSD30S-1502400 | 15 | 2.4 | 36 | 89 | 120 |
| 56YSD30S-2401500 | 24 | 1.5 | 36 | 89 | 150 |
| 56YSD30S-4800725 | 48 | 0.725 | 36 | 89 | 150 |

Input Specifications

| | |
|------------------------|--|
| Input voltage range | 90~264V AC |
| Input Electrical Phase | Single |
| Line Frequency | 47-63Hz |
| Inrush Current | 25 Amps max. at 115VAC & 45Amps max. at 230VAC |
| AC Current | 0.88A/115VAC 0.48A/230VAC |
| Leakage Current | <0.25mA/240VAC |

Output Specifications

| | |
|---------------------------|---|
| Output Voltage Adjustment | +/- 10% Depending on Model |
| Voltage Tolerance | ± 2% |
| Line Regulation | ± 1% |
| Load Regulation | ± 1% |
| Isolation Resistance | I/P-O/P:100M Ohms / 500VDC / 25 / 70% RH |
| Setup, Rise, Hold Up time | 500mS/50mS/12ms (115V at full load), 500mS/50mS/30ms (230V at full load) |

Protection

| | | |
|---|---|------------|
| Overload Protection | >105%-160% rated output power - Hiccup mode when output voltage <50%, auto recovers after fault condition is re-moved. Constant current limiting within 50%-100% rated output voltage, auto recovers after fault condition is removed | |
| Over Voltage Protection | 5.75 – 7.5v | 5v model |
| | 15 – 18v | 12 v model |
| | 18.8 – 22.5v | 15 v model |
| | 30 – 36v | 24 v model |
| | 57.6 – 67.2v | 48 v model |
| Protection type: shutdown o/p voltage, re-power on to recover | | |

Operational Environment

| | |
|-----------------------------|---|
| Operating Humidity | 20% ~ 90% RH non-condensing |
| Operating Temperature Range | -20°C to 70 °C |
| Storage Temperature Range | -40°C to 85 °C |
| Storage Humidity | 10% ~ 95% RH |
| 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 IEC 60068-2-6 |
| Operating Altitude | 5000 meters |
| Over Voltage Category | II, According to EN 62368-1: altitude up to 200 meters |

Safety & EMC

| | |
|-----------------------|--|
| Safety Standard | UL 62368-1, BS EN/EN 62368-1 |
| Withstand Voltage | I/P-O/P:4KV AC |
| Insulation Resistance | I/P-O/P:100M Ohms / 500V DC / 25°C / 70% RH |
| EMC Emission | BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3 |
| EMC Immunity | BS EN/EN 61000-4-2,3,4,5,6,8,11 |

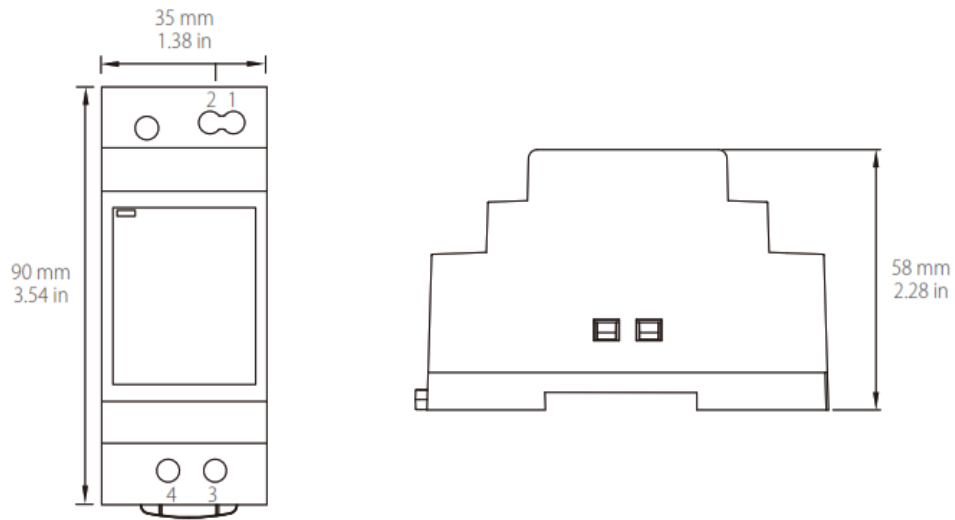
Mechanical Specifications

| | |
|--------------------|---|
| Mounting Style | Din Rail Mount |
| Connection Type | Screw Terminal Type |
| Housing Material | Fully Enclosed Plastic Case |
| Overall Dimensions | 58 x 35 x 90 mm / 2.28 x 1.38 x 3.54 in |
| Weight | 120g |

Packaging

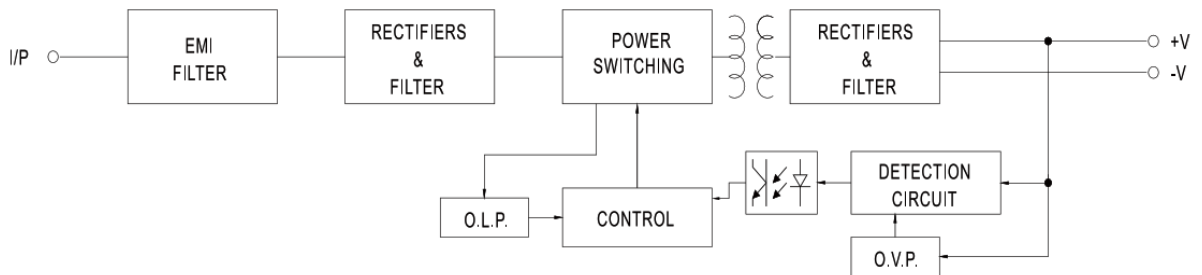
| | |
|--------------------------|--|
| Carton Size | 37 x 22 x 25 cm / 14.57 x 8.66 x 9.84 in |
| Master Carton Quantities | 50pcs / Carton |

Mechanical Drawing



| Input | | Output | |
|-------|-------------|--------|-------------|
| No. | Description | No. | Description |
| 1 | +V | 3 | AC/L |
| 2 | -V | 4 | AC/N |

Functional Diagram



Curves

