

## Features

- Input Voltage 90~264V AC or 127~370V DC
- Cooling by free air convection
- Efficiency up to 91%
- Protection: OLP, OVP, OTP SCP
- Three Years Warranty



Ideal Power's 56YEL100-xy 100W Enclosed AC/DC Power Supply (PSU) Series complies with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

### Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Voltage Adj. Range (V)	Ripple & Noise (mVp-p)
56YEL100-05	5	18	90	86	4.5~5.5	100
56YEL100-12	12	8.5	102	88	10.2~13.8	120
56YEL100-15	15	7	105	88.5	13.5~18	120
56YEL100-24	24	4.5	108	90	21.6~28.8	150
56YEL100-36	36	2.8	100.8	90.5	32.4~39.6	200
56YEL100-48	48	2.3	110.4	91	43.2~52.8	200

### Input Specifications

Input Voltage	90-264VAC/127-370VDC - 50/60Hz
Frequency Range	47-63Hz
AC Current	1.9A/115V AC – 1.2A/230V AC
Inrush Current	Cold Start 50A at 230V AC
Leakage Current	< 0.75mA/240V AC
Connection	I/P: 3 poles terminal Block

**Output Specifications**

Voltage Tolerance	±1.0%	5v
	±0.5%	Others
Line Regulation	±0.5%	
Load Regulation	±1.0%	5v
	±0.5%	Others
Set up	500ms, 30ms/230VAC at full load	
Rise Time	500ms, 30ms/115VAC at full load	
Hold up Time	55ms/230VAC at full load - 10ms/115VAC at full load	
Connection	O/P: 4 poles terminal Block	

**Protection**

Over Load	110%-150% Rated Output Power	
Over Voltage	5.75~ 6.75V	5v
	13.8 ~ 16.2V	12v
	18.75~21.75V	15v
	28.8~33.6V	24v
	41.4~48.6V	36v
	55.2~64.8V	48v
Protection type: Shut down o/p voltage, re-power on to recover.		

**Environmental Characteristics**

Working Temp	-30~+70°C (Refer to "Derating Curve")
Working Humidity	20~90% RH non-condensing
Storage Temp., Humidity	-40~+85°C, 10~95% RH non-condensing
Temp. Coefficient	±0.03%/°C (0~50°C)
Vibration	10 ~ 500Hz, 5G 10min. /1cycle, period for 60min. each along X, Y,Z axes
Over Voltage Category	III; According to BS EN/EN61558, BS EN/EN50178, BS EN/EN60664 BS EN/EN62477-1; altitude up to 2000 meters
MTBF	3348.9k hrs min. Telcordia SR-332 (Bellcore)

**Safety & EMC**

Safety Standards	
Withstand Voltage	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:1.25KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/ 500VDC/25 °C/70% RH
EMC Emission	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3,
EMC Immunity	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035

**Notes:**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured from peak to peak with band width limit of 20MHz (0.1uf and 47uf /50V parallel capacitor under DC output full load, AC nominal input 25 °C ambient temperature).
3. Derating may be needed under low input voltages. Please check the derating curve for more details.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
5. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m(6500ft).

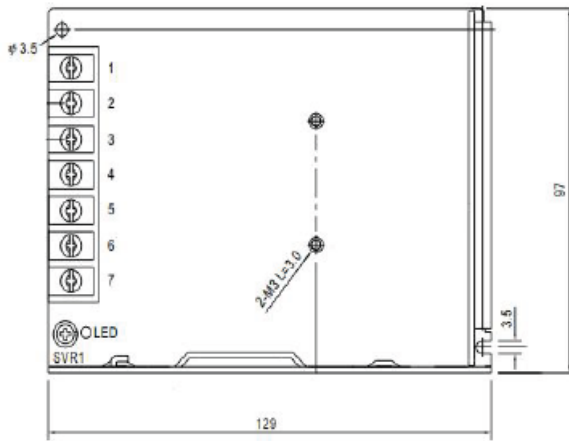
**Dimensions & Weight**

Size	129x97x30mm / 3.89x3.22x1.18in
Weight	340g

**Packaging**

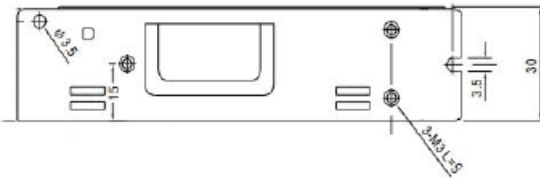
Carton Size	36x31.5x17.5cm / 14.17x12.40x6.89in
Master Carton Quantities	30pcs/Carton

**Dimensions and Recommended Layout**



Input

No.	Description
1	AC/L
2	AC/N
3	FG $\perp$

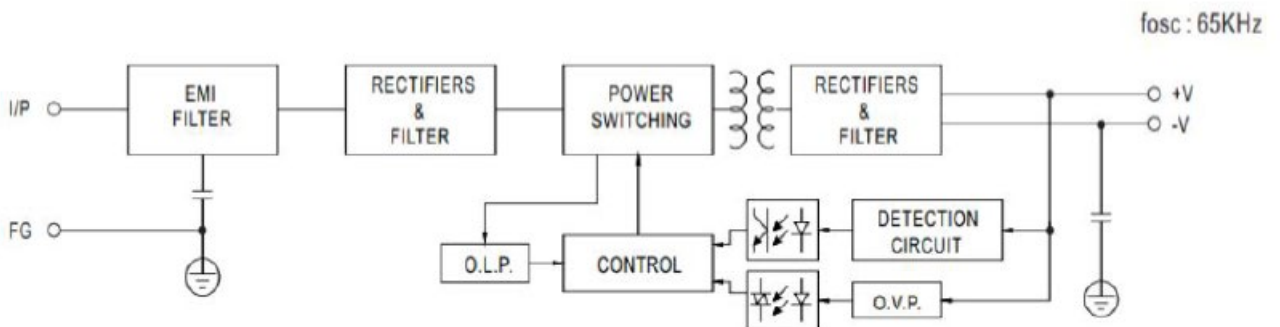


Output

No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

AC – DC

**Block Diagram**



Derating Curve

