

# IRM-30 Series

30W Single Output Encapsulated Power Supply



Case No: 8913DN ~ PCB mounting style: 69.5 x 39 x 24mm  
Case No: 8910AX ~ Screw terminal style: 91 x 39.5 x 28.5mm

## Features

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Overload / Over Voltage
- Cooling by free air convection
- Isolation class II
- No load power consumption <0.1W
- 100% full load burn-in test
- High reliability
- 3 years warranty

LPS

## Specification

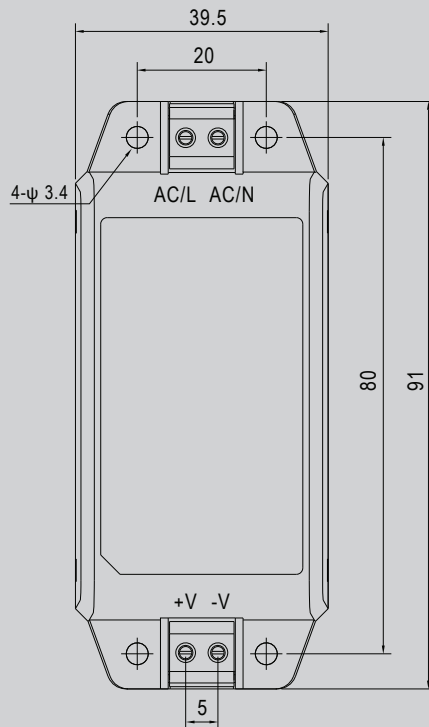
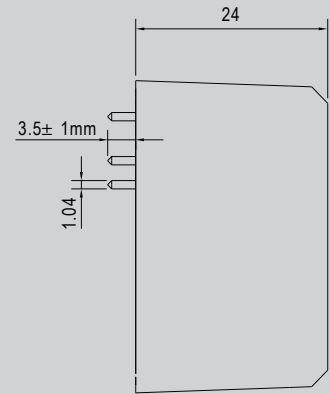
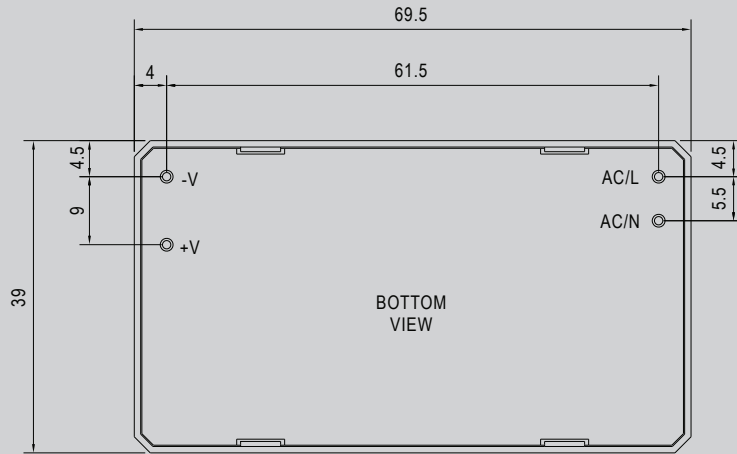
INPUT	<b>Voltage</b>	85 ~ 264V				
	<b>Frequency</b>	47 ~ 440Hz				
	<b>AC Current</b>	0.75A/115VAC		0.5A/230VAC		
	<b>Efficiency</b>	83%	88%	88%	88.5%	90%
	<b>Inrush Current</b>	Cold Start 25A/115VAC		45A/230VAC		
	<b>Leakage Current</b>	<0.25mA/240VAC				
	OUTPUT	<b>MODEL No.</b>	<b>IRM-30-5</b>	<b>IRM-30-12</b>	<b>IRM-30-15</b>	<b>IRM-30-24</b>
<b>DC Voltage</b>		5V	12V	15V	24V	48V
<b>Rated Current</b>		6A	2.5A	2A	1.3A	0.63A
<b>Current Range</b>		0 ~ 6A	0 ~ 2.5A	0 ~ 2A	0 ~ 1.3A	0 ~ 0.63A
<b>Rated Power</b>		30W	30W	30W	31.2W	30.2W
<b>R &amp; N (max)</b>		120mVp-p	150mVp-p	200mVp-p	240mVp-p	300mVp-p
<b>Voltage Tolerance</b>		±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
<b>Line Regulation</b>		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
<b>Load Regulation</b>		±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
<b>Setup, Rise Time</b>		1000ms, 30ms/230VAC 1500ms, 30ms/115VAC at full load				
<b>Hold Up Time</b>		40ms/230VAC 12ms/115VAC at full load				
PROTECTION	<b>Overload</b>	105% ~ 160% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed				
	<b>Over Voltage</b>	5.25 ~ 6.75V	12.6 ~ 16.2V	15.75 ~ 20.25V	25.2 ~ 32.4V	50.4 ~ 64V
		Protection type : Shut off o/p voltage, clamping by zener diode				
ENVIRONMENT	<b>Working Temperature</b>	-30 ~ +70°C (Refer to "Derating Curve")				
	<b>Working Humidity</b>	20 ~ 90% RH non-condensing				
	<b>Storage Temp.</b>	-40°C ~ +85°C, 10~95% RH				
	<b>Temp. Coefficient</b>	±0.03%/°C (0~50°C)				
SAFETY & EMC	<b>Vibration</b>	10 ~ 500Hz, 5G 10min./1 cycle, period for 60 min. each long X, Y, Z axes				
	<b>Safety Standards</b>	UL60950-1, TUV EN60950-1 approved				
	<b>Withstand Voltage</b>	I/P-O/P:3KVAC				
	<b>Isolation Resistance</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
OTHERS	<b>EMC Emission</b>	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3,				
	<b>EMC Immunity</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N:1KV), criteria A				
	<b>MTBF</b>	593.3Khrs min. MIL-HDBK-217 (25°C)				
	<b>Packaging</b>	PCB mounting style: 0.109Kg;144pcs/16.7Kg/0.97CUFT				Screw terminal style: 0.12Kg;120pcs/15.4Kg/0.74CUFT

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.

# IRM-30 Series

30W Single Output Encapsulated Power Supply

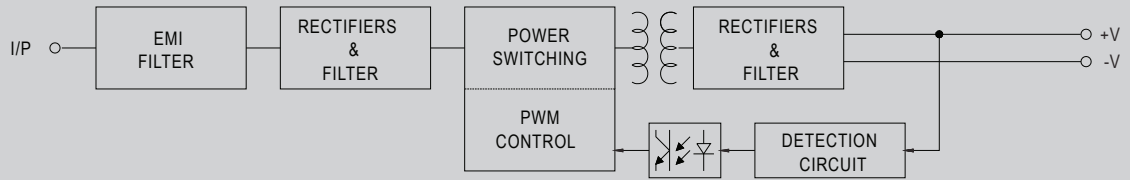
## Mechanical Specification



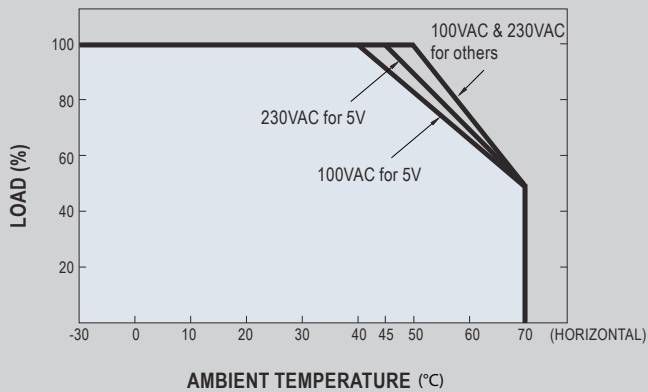
# IRM-30 Series

30W Single Output Encapsulated Power Supply

## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

