

# YMR30 SERIES

30W





YMR30 is a 30W miniature (69.6\*39\*24.2mm) AC-DC module-type power supply, ready to be soldered onto the PCB boards of various kinds of electronic instruments or industrial automation equipments. This product allows the universal input voltage range of 85~305VAC.







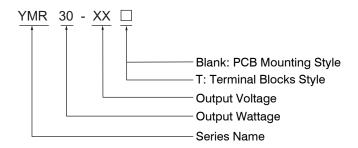
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#### **Features**

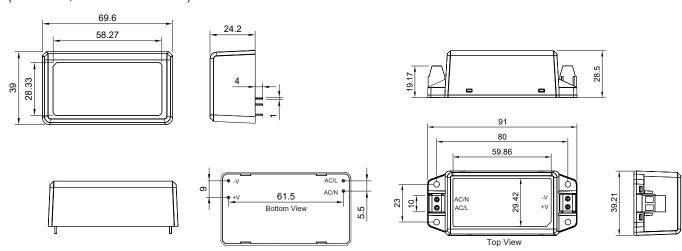
- Universal AC Input/ Full Range
- No load power consumption<0.1W
- Wide operating temperature range -30~85℃
- High efficiency up to 88%
- Protections: Short circuit/Over load/Over voltage
- Isolation Class II
- Three years warranty

### **Model Description**



### **Dimensions and installation**

(Unit: mm, tolerance: ±0.5mm)



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# **Specification**



Model	Safety Model No.	YMR30-5 □	YMR30-12 □	YMR30-15 □	YMR30-24 □	YMR30-48 □
	DC Voltage	5V	12V	15V	24V	48V
Output	Rated Current	6A	2.5A	2A	1.25A	0.625A
	Rated Power	30W	30W	30W	30W	30W
	Ripple & Noise(max.)	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p
	Voltage Tolerance	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Max.Capactive Load	-				
	•	6000uF				
	Setup,Rise,Hold up Time  Rated Voltage Range	1.95,50115,40115/230VAC(at full load)				
Input	Voltage Range	85-305VAC/120-430VDC				
	Frequency Range	47-63Hz				
	AC Current	1.0A/115VAC 0.5A/230VAC 0.3A/277VAC				
	Inrush Current	Cold Start 45A/400us at 230VAC 50Hz  Cold Start 45A/400us at 230VAC 50Hz				
	Leakage Current	Cold Start 45A/4000us at 230VAC 50HZ Cold Start 25A/6000us at 115VAC 50HZ				
	Efficiency	85%	87%	87%	87%	88%
	No Load Power Consumption	<0.1W	0170	0170	07.70	0070
	Loud I ower consumption	115~160%				
Protection	Over Load	Hiccup mode, recovers automatically after fault condition is removed.				
	Short Circuit	•	vers automatically af			
	Over Voltage	5.25 ~ 7.5V	12.8 ~ 16V	17 ~ 24V	27 ~ 34V	50.4 ~ 63V
		Shut off o/p voltage, clamping by zener diode				
Ambient	Working TEMP.	-30 ~ +85 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%/(0 ~ 40 °C)				
	Vibration	PCB Mounting: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes Terminal Blocks: 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	Soldering Temperature	Wave soldering:265 C,5s(max.); Manual soldering:390 C,3s(max.)				
	Over Voltage Category	OVC III				
Safety	Safety Standards	EN60335-1, EN62233, EN IEC62368-1, UL62368-1				
	Withstand Voltage	I/P-0/P: 3KVAC/1min				
	Isolation Resistance		100M Ohms / 500VDC / 25 C / 70% RH			
EMC	EMC Emission	Parameter	Standard		st Level	
		Conducted Radiated	EN55014-1 EN55014-2		LASS B LASS B	
		Harmonic Current	EN61000-3-		LASS A	
		Voltage flicker	EN61000-3-			
		1				
	EMC Immunity	Parameter	Standard	Te	st Level	
		ESD	EN61000-4-	-2 Le	evel 3, 8KV air,Level 2, 4KV contact criteria A	
		Radiated Susceptib			evel 3, criteria A	
		EFT/Burest	EN61000-4-		Level 3, criteria B	
		Surge	EN61000-4-		Level 3, 1KV/L-N, criteria B	
		Conducted	EN61000-4-		Level 3, criteria A Level 4, criteria A	
		Magnetic Field  Voltage Dips and interruptions	EN61000-4- EN61000-4-	-11 >	> 95% dip 0.5 periods, 30% dip 25 periods, > 95% interruptions 250 periods	
Others	Weight	PCB Mounting: 94g/pcs; Terminal Blocks: 113g/pcs				
	Packing	PCB Mounting: 32.5×17.5x25cm 100pcs/Carton; Terminal Blocks: 41.5×25x17cm 100pcs/Carton				
	Dimension (LxWxH)	PCB Mounting: 69.6 × 39 x 24.2 mm; Terminal Blocks: 91 × 39.21 x 28.5 mm				
	MTBF 654.7Khrs min. MIL-HDBK-217F(25 °C)  1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 °C of ambient temperature.					
Note	<ol> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF &amp; 47μF parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The ambient temperature derating of 3.5 C/1000m with fanless models and of 5 C/1000m with fan models for operating altitude higher than 2000m (6500ft).</li> <li>The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For</li> </ol>					
	guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies". (as available on https://yingjiao.com/wp-content/up-loads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf)					

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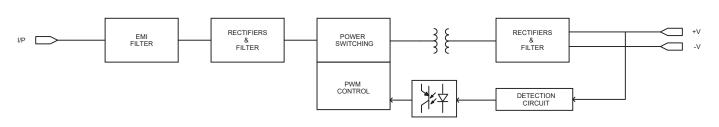


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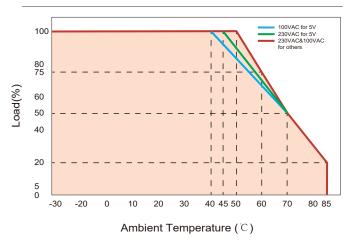
### **Block Diagram**

fosc: 65KHz



## **Engineering Data**

### **Derating Curve**



### Static Characteristics

