YINGJIAO

YMR10 SERIES
10W

YMR10 is a 10W miniature (46.08*25.78*21.7mm) AC-DC module-type power supply, ready to be soldered onto the PCB boards of various kinds of electronic instruments or industriai automation equipments. This product allows the universal input voltage range of 85～305VAC.

RoHS CE

Features

- Universal AC Input/ Full Range
- No load power consumption<0.1W
- Wide operating temperature range -30～85℃
- High efficiency up to 82%
- Protections: Short circuit/Over load/Over voltage
- Isolation Class II
- Three years warranty

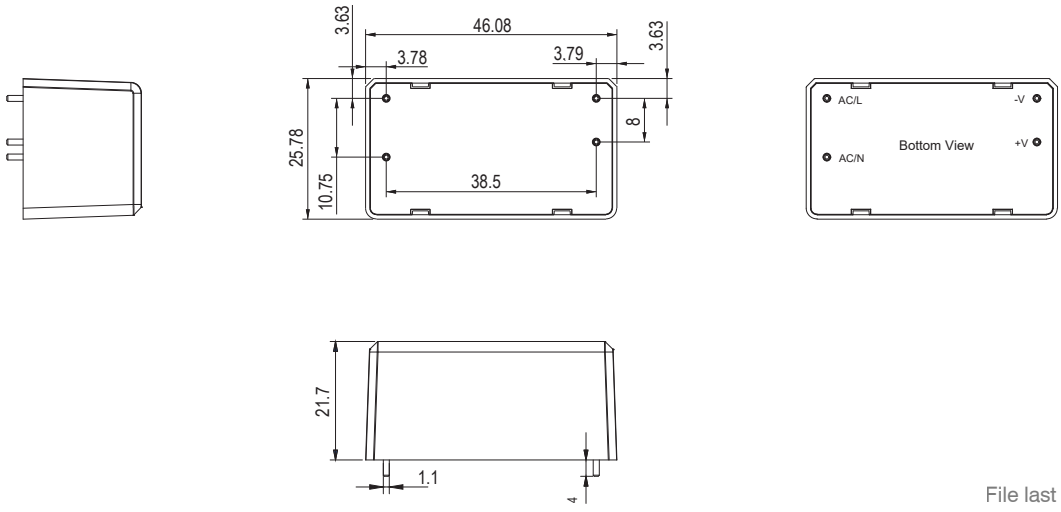
Model Description

YMR 10 - XX

- XX: Output Voltage
- 10: Output Wattage
- YMR: Series Name

Dimensions and installation

(Unit: mm , tolerance: ±0.5mm)



File last modification time: 2025-9-23

Specification

YINGJIAO

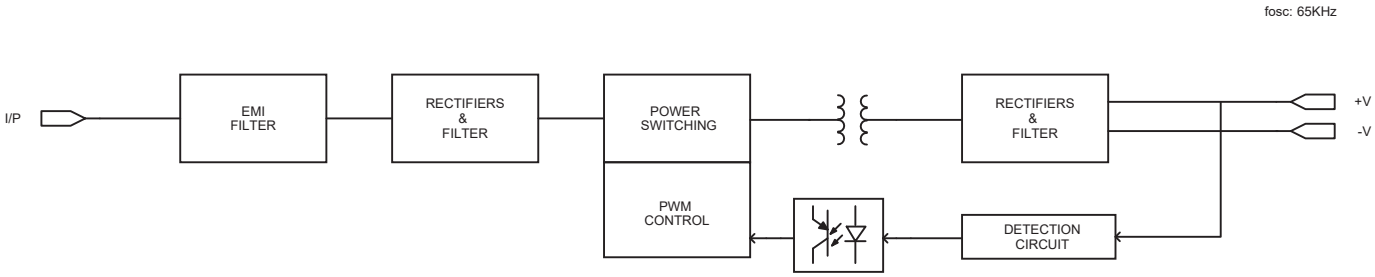
Model	Safety Model No.	YMR10-3.3	YMR10-5	YMR10-12	YMR10-15	YMR10-24
Output	DC Voltage	3.3V	5V	12V	15V	24V
	Rated Current	2.5A	2A	0.85A	0.66A	0.42A
	Rated Power	8.25W	10W	10.2W	9.9W	10.08W
	Ripple & Noise(max.)	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	Voltage Tolerance	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
	Line Regulation	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%
	Load Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Max.Capactive Load	8000uF	5000uF	2000uF	1000uF	800uF
	Setup,Rise,Hold up Time	1.0s,30ms,30ms/230VAC(at full load)		1.5s,30ms,8ms/115VAC(at full load)		
Input	Rated Voltage Range	100-277VAC				
	Voltage Range	85-305VAC/120-430VDC				
	Frequency Range	47-63Hz				
	AC Current	0.3A/115VAC	0.15A/230VAC	0.125A/277VAC		
	Inrush Current	Cold Start 40A/400us at 230VAC 50Hz		Cold Start 20A/600us at 115VAC 50Hz		
	Leakage Current	<0.707mA/277VAC				
	Efficiency	80%	82%	82%	82%	81%
	No Load Power Consumption	<0.1W				
Protection	Over Load	110~200%				
		Hiccup mode, recovers automatically after fault condition is removed.				
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.				
	Over Voltage	3.8 ~ 6V	5.8 ~ 7.5V	12.8 ~ 16V	17 ~ 24V	27 ~ 34V
		Hiccup mode, recovers automatically after fault condition is removed.				
Ambient	Working TEMP.	-30 ~ +85℃(Full load can be operated at -30℃ to 50℃, while load should be reduced at 50℃ to 85℃. Refer to"Derating Curve".)				
	Working Humidity	20 ~ 90%RH Non-condensing				
	Storage TEMP. Humidity	-40 ~ +85℃,10 ~ 95%RH Non-condensing				
	TEMP. Coefficient	±0.03%/(0 ~ 40℃)				
	Vibration	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	Soldering Temperature	Wave soldering:265℃,5s(max.); Manual soldering:390℃,3s(max.)				
	Over Voltage Category	OVC II; According to EN62368-1; altitude up to 2000 meters				
Safety	Safety Standards	EN62368-1				
	Withstand Voltage	I/P-O/P: 3KVAC/1min				
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH				
EMC	EMC Emission	Parameter	Standard	Test Level		
		Conducted	EN55032(CISPR32)	CLASS B		
		Radiated	EN55032(CISPR32)	CLASS B		
		Harmonic Current	EN61000-3-2	CLASS A		
		Voltage flicker	EN61000-3-3	.....		
	EMC Immunity	EN55035				
		Parameter	Standard	Test Level		
		ESD	EN61000-4-2	Level 3, 8KV air,Level 2, 4KV contact criteria B		
		Radiated Susceptibility	EN61000-4-3	Level 3, criteria A		
		EFT/Burest	EN61000-4-4	Level 3, criteria B		
		Surge	EN61000-4-5	Level 3, 1KV/L-N, criteria B		
		Conducted	EN61000-4-6	Level 3, criteria A		
		Magnetic Field	EN61000-4-8	Level 4, criteria A		
		Voltage Dips and interruptions	EN61000-4-11	＞95% dip 0.5 periods, 30% dip 25 periods, ＞95% interruptions 250 periods		
Others	Packing	35g/pcs; 41 x 36 x 16 cm; 200pcs/carton				
	Dimension (LxWxH)	46.08 x 25.78 x 21.7 mm				
	MTBF	1364.7Khrs min. MIL-HDBK-217F(25℃)				
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. 5. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5 ℃/1000m with fan models for operating altitude higher than 2000m (6500ft). 6. 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 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/uploads/2025/06/EMI_Testing_of_Component_Power_Supplies_Yingjiao.pdf)					

File last modification time: 2025-9-23

YINGJIAO

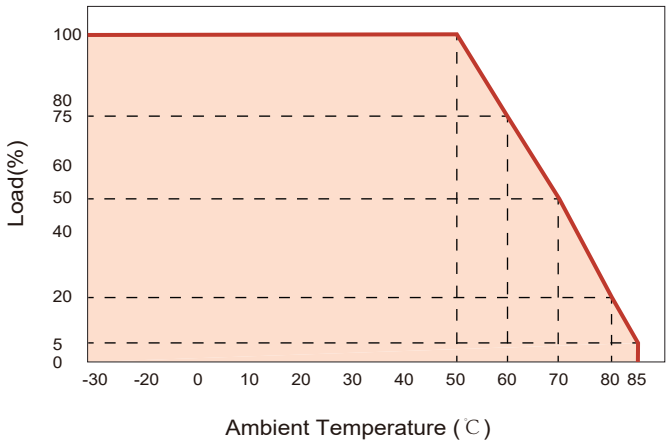
YMR10 SERIES
10W

Block Diagram



Engineering Data

Derating Curve



Static Characteristics