



## MW RS-50 Series 50W Single Output Switching Power Supply Owner's Manual

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MW RS-50 Series 50W Single Output Switching Power Supply



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## Features

- Universal AC input/ Full range
- Protections: Short circuit/ Overload I Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- No load power consumption<0.5W
- High efficiency, long life and high reliability
- 3 years warranty

## SPECIFICATION

MODEL		RS-50-3.3	RS-50-5	RS-50-12	RS-50-15	RS-50-24	RS-50-48
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V
	RATED CURRENT	10A	10A	4.2A	3.4A	2.2A	1.1A
	CURRENT RANGE	0-10A	0-10A	0- 4.2A	0-3.4A	0- 2.2A	0-1.1A
	RATED POWER	33W	50W	50.4W	51W	52.8W	52.8W

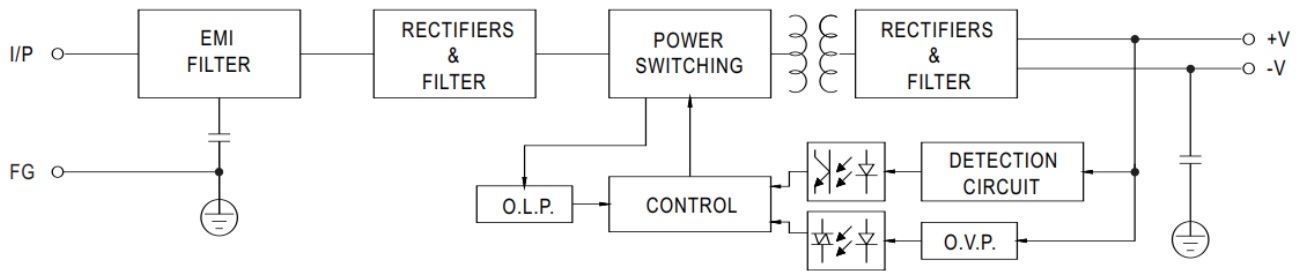
OUTP UT	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-p	120mVp-p	200mVp-p
	VOLTAGE ADJ. R ANGE	3V- 3.6V	4.75- 5.5V	10.8-13.2V	13.5-16.5V	22- 27.2V	42- 54V
	VOLTAGE TOLER ANCE Note.3	±3.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATI ON Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATI ON Note.5	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIM E	500ms, 30ms/230VAC      1200ms, 30ms/115VAC at full load					
	HOLD UP TIME (Typ.)	60ms/230VAC      14ms/115VAC at full load					
INPU T	VOLTAGE RANG E	88- 264VAC      125- 373VDC (Withstand 300VAC surge for 5sec. Without dama ge)					
	FREQUENCY RA NGE	47- 63Hz					
	EFFICIENCY(Typ. )	78%	83%	84.5%	86%	88%	89%
	AC CURRENT (Ty p.)	1.3A/115VAC      0.8A/230VAC					
	INRUSH CURRE NT (Typ.)	COLD START 33A/230VAC					
	LEAKAGE CURR ENT	<2mA/ 240VAC					
	OVERLOAD	110 – 150% rated output power					

PROTECTION		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	3.8-4.45V	5.75- 6.75 V	13.8-16.2V	17.25- 20.2 5V	27.6-32.4V	55.2 – 64.8 V
		Protection type: Hiccup mode, recovers automatically after fault condition is removed					
ENVIRONMENT	WORKING TEMP.	-25 – +70°C (Refer to “Derating Curve”)					
	WORKING HUMIDITY	20 – 90% RH non-condensing					
	STORAGE TEMP. , HUMIDITY	-40 – +85°C, 10 – 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0- 50°C)					
	VIBRATION	10 – 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1 , AS/NZS 62368.1 , EAC TP TC 004, CCC GB4943.1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, 1/P-FG, 0/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,GB9254 class B,GB17625.1, EAC TP TC 020					
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), heavy industry level, EAC TP TC 020					
OTHERS	MTBF	2956.7K hrs min. Telcordia SR-332 (Bellcore); 575.2K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	99*97*36mm (L*W*H)					

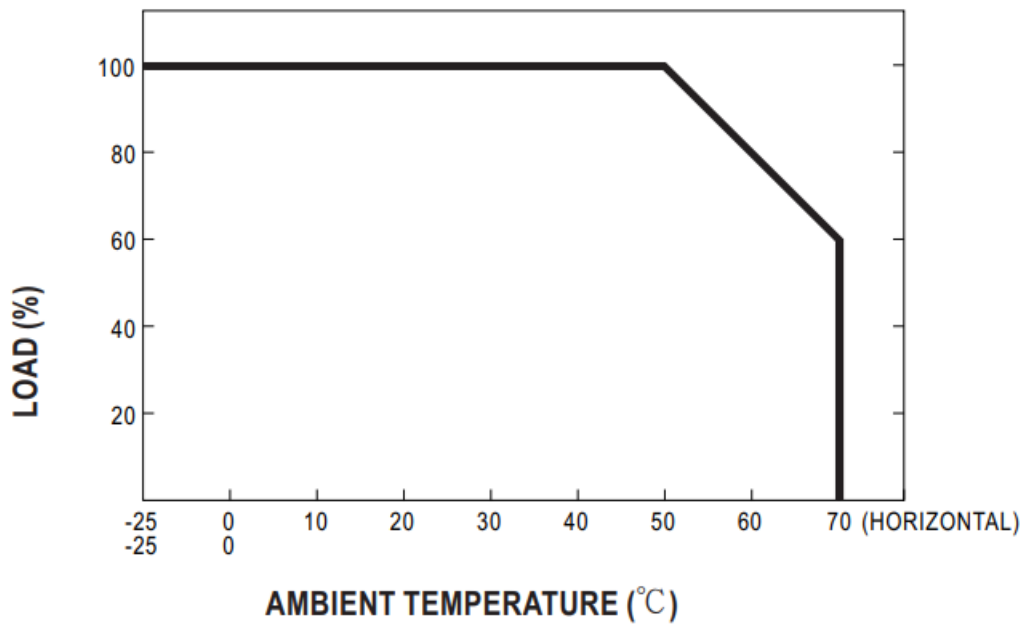
	<b>PACKING</b>	0.41Kg; 45pcs/19.5Kg/0.94CUFT
<b>NOTE</b>	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 0% to 100% rated load.</li> <li>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>7. 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>8. Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></li> </ol>	

## Mechanical Specification

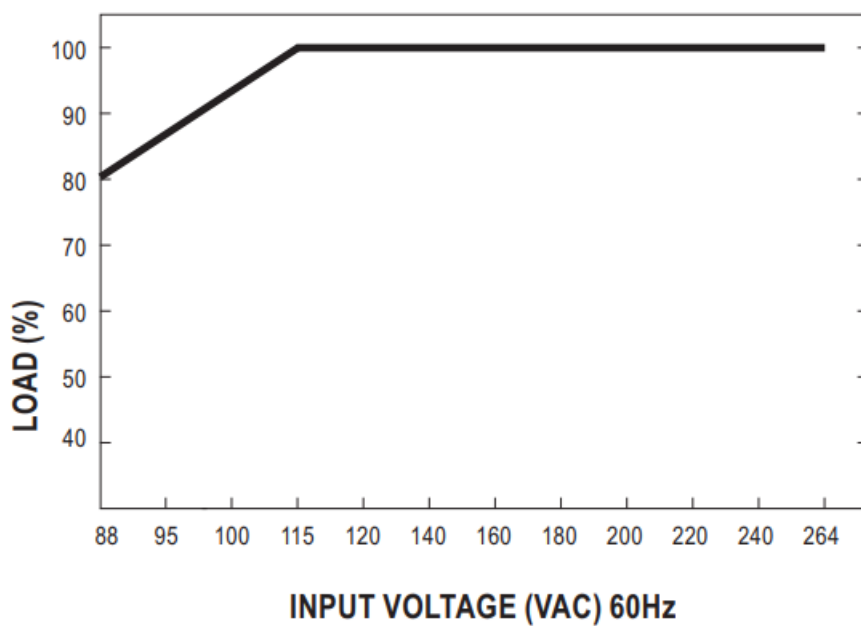




## Derating Curve



## Output Derating VS Input Voltage



CUSTOMER SUPPORT



Downloaded from [Arrow.com](https://www.arrow.com).



Documents / Resources

	<p><a href="#">MW RS-50 Series 50W Single Output Switching Power Supply</a> [pdf] Owner's Manual RS-50-3.3, RS-50-5, RS-50 Series 50W Single Output Switching Power Supply, Series 50W Single Output Switching Power Supply, 50W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply</p>
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References

- [MEAN WELL Switching Power Supply Manufacturer](#)