

### Features

- Universal AC input: 88 to 264VAC
- Output voltage is +5V @ 10A full load
- No fan required, convection cooling
- Short circuit protection
- Overload and overvoltage protection
- Withstands 300VAC input surge for 5 seconds
- Complies with safety, EMI, and EMS standards
- LED indicator for Power-On visual status
- Output voltage adjustable
- High efficiency, long life, high reliability
- Operating temperature: -20° to + 70°C
- Small size: 99 x 97 x 36mm

### Product Description

WinSystems' PS-RS50-5 is a small, convection cooled 50W power supply for embedded systems. It is a universal design that accepts 88 to 264VAC input and generates up to 10A of current at +5 volts. The +5 volt output can be adjusted with an on board trimpot. The PS-RS50-5 is small, measuring only 99 x 97 x 36mm.

The unit meets various safety and EMC standards. It is UL60950-1 and TUV EN60950-1 approved. For EMI and conduction and radiation, it is compliant to EN55022 (CISPR22) Class B. It also is compliant with EN61000-4-2, 3, 4, 5, 6, 8, 11: ENV50204, EN61000-6-2 (EN50082-2) heavy industry criteria A for EMS immunity.

There are five different ordering options. The variations are defined by the DC harness for our single board computers (SBCs) in the PC/104, SUMIT-ISM, EPIC, or EBX form factors or no DC harness at all.

#### Technical Support and Custom Configurations -

WinSystems offers free support to speed your initial design cycle into production. Our engineers are dedicated to answering your questions.

If you do not see a product or feature listed in our literature that you require, please contact us. We may have a product in development or can modify existing product to serve your needs.

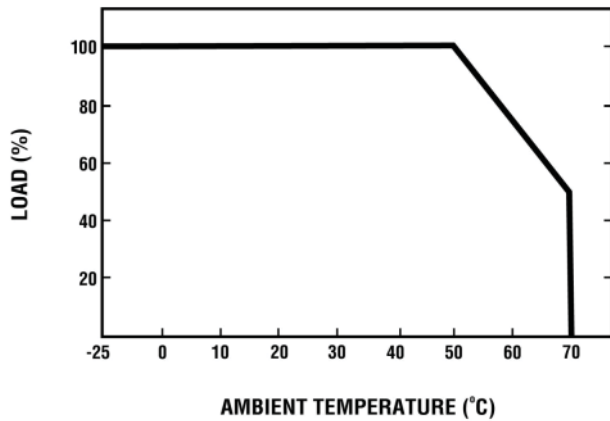


### Specifications

<b>Output</b>	DC Voltage	5V
	Rated Current	10A
	Current Range	0~10A
	Rated Power	50W
	Ripple & Noise (max.)	80mV p-p
	Voltage Adj. Range	4.75~5.5V
	Voltage Tolerance	±2%
	Line Regulation	±0.5%
	Load Regulation	±1.0%
	Setup, Rise Time	1200mS, 30mS
<b>Input</b>	Hold Time (typ.)	14 mS/115VAC
	Voltage Range	88~264VAC
	Frequency Range	47~63Hz
	Efficiency (typ.)	78%
	AC Current (typ.)	1.3A/115VAC
	Inrush Current (typ.)	33A/230VAC cold start
<b>Protection</b>	Leakage Current	<2mA/240VAC
	Over Load	110~150% rated output power Recovers after fault removed
	Over Voltage	5.75~6.75V Recovers after fault removed
<b>Environment</b>	Operational Temp.	-25° to +70°C
	Humidity	20~85 RH non-condensing
	Storage Temperature	-40° to +85°C
	Temp Coefficient	±0.03%/°C
<b>Other</b>	Vibration	10~500Hz, 5G
	MTBF	228,000 hours
	Dimensions (LWH)	99 x 97 x 36mm
	Weight	0.8 lbs, 0.36 kg

# PS-RS50-5 - 50 Watt Power Supply

## Output Derating Curve

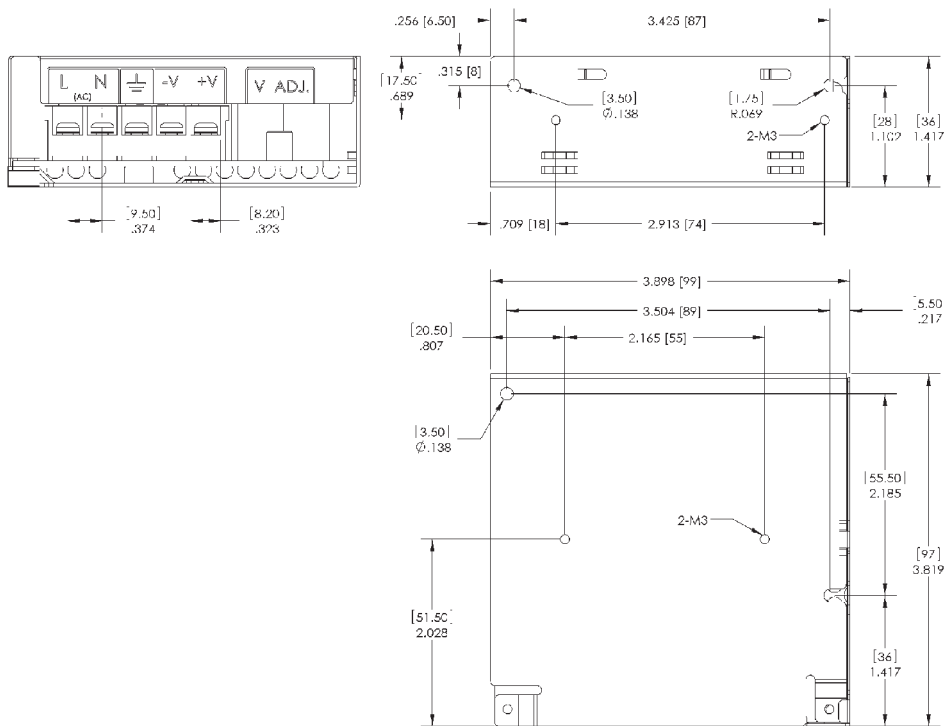


## Ordering Information

- PS-RS50-5-0 50W power supply
- PS-RS50-5-EBC 50W power supply with AC Power cord and DC cable for EBX SBCs
- PS-RS50-5-EPX 50W power supply with AC Power cord and DC cable for EPIC SBCs
- PS-RS50-5-PCM 50W power supply with AC Power cord and DC cable for PC/104 SBCs
- PS-RS50-5-PXM 50W power supply with AC Power cord and DC cable for SUMIT-ISM™ SBCs

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## Mechanical dimensions of the PS-RS50-5 without cables attached



## Terminal Pin Number Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	GND
4	DC Output -V
5	DC Output +V



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