

<h2 style="margin: 0;">UNIVERSAL 80W POWER SUPPLY</h2> <h3 style="margin: 0;">RUGGEDIZED MILITARY DESIGN</h3>	<h2 style="margin: 0;">RTPS80-XX-02 Series</h2> <p style="margin: 0; font-size: small;">07/30/2021</p>
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**FEATURES**

- Meets FCC Part 15 Class B, CISPR22.2 Class A, MIL-STD-461-F Compliant
- Rugged metal enclosure with potting offers improved shock and vibration performance and resistance to environmental factors
- Universal input 100~240V +/- 10%
- Convection-cooled
- Compact size
- UL Listed 60950-1

Ritronics, Inc.

AC TO DC POWER SUPPLY  
MODEL:RTPS80-05-02  
INPUT:100-240~, 47-63HZ, 2A  
OUTPUT:+5V---, 16A

ATTENTION  
Surface Chassis  
No gas Toucher
CAUTION  
Hot surfaces  
Do not touch

**LISTED**  
E500956  
ZF29  
60950-1



**SPECIFICATIONS**

MODEL		RTPS 80-XX-02 series			
<b>INPUT</b>	Voltage and Frequency	90~264Vac, 47 ~ 63Hz			
	AC Current	1 A maximum at any input voltage range at maximum load condition			
	Inrush Current(Typ.)	less than 40A at 120V~240v input (Optional low inrush model: less than 15 A at 110V input and less than 30 A at 220V input)			
	Power Factor	Passive power factor correction, meets EN61000-3-2 CLASS A			
	Leakage Current	<0.75mA / 240VAC 60HZ			
<b>OUTPUT</b>	Part Number	RTPS 80-05-02	RTPS 80-12-02	RTPS 80-24-02	
	Output Voltage	5V	12V	24V	
	Current (A) Minimum	0A	0A	0A	
	Current (A) Maximum	16A	6.7A	3.3A	
	Max Rated Power	80W	80W	80W	
	Voltage Initial Setting	+/- 1%	+/- 1%	+/- 1%	
	Combined Load/Line Regulation	Output Maximum full rated o/p, CURRENT Regulation +/-5%,			
	Ripple and Noise	The ripple and noise is as follows when measured with maximum bandwidth of 20Mhz and 4.7uF/50V cross connected at output wire shall be less than 1% P-P			
	Efficiency	81% minimum at 120~240VAC at maximum load			
	Turn-On Time	0.5S maximum to 90% of rated output voltage.			
	Hold up time	8 mS minimum			
<b>PROTECTION</b>	Over Current	Output limited less than 120% max rated output current			
	Short Circuit	output shall shut down and automatic restart			
	Over Voltage	Power supply shall not exceed 115% ~130% of rated output voltage.			
	Over Temperature	Power supply shall reduce the output voltage and current at the out of spec high temperature condition and maintain the hot spot temperature below components rating.			
<b>ENVIRONMENT</b>	Operating Temperature	nominal -40 to +60°C ambient at full load Linearly de-rate output power to 70% up to 80°C			
	Operating Humidity	5% to 95%, non-condensing			
	Cooling Requirement	Natural air convection cooling			
	Storage Temp., Humidity	-40 ~ +85°C 10 ~95% R.H			
	Altitude	15,000 ft minimum operation and -500ft to 40,000 ft storage			
	Vibration	Frequency 5 to 50 Hz, acceleration ±7.35 M/(S*S), direction X,Y and Z Axis			
<b>SAFETY &amp; EMC</b>	Safety Standards	Complies with the applicable UL, CSA, CE and IEC safety requirements, including GS differences. Official qualification for each, including CB scheme and UL 60950-1 listed.			
	EMI Conduction & Radiation	Meets FCC Part 15 Subpart A and B Class B, ICES-003, CISPR-32, CISPR-24, EN 55032, EN 61000-3-2, EN 61000-3-3 With EMI filter meets MIL-STD-461F, FIXED WING EXTERNAL AND HELICOPTERS CE102,RE102,CS101,CS114,CS115,CS116,RS103			
	Reliability	Mean Time Between Failure (MTBF) >100,000 hours, MIL-HDBK217E at 40 degrees C ambient.			
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, heavy industry level (surge 4KV), criteria A			
	Isolation	1500VAC minimum from AC input to DC output 1500VAC minimum from AC input to Chassis Ground 500VAC minimum from DC output to Chassis Ground			
	Burn-In	48 hours at 100% rated load prior to final testing			
	MTBF	200K hrs minimum at 25C, convection cooled, per part calculation method			
	Warranty	3 years			

# UNIVERSAL 80W POWER SUPPLY

## RUGGEDIZED MILITARY DESIGN

# RTPS80-XX-02 Series

07/30/21

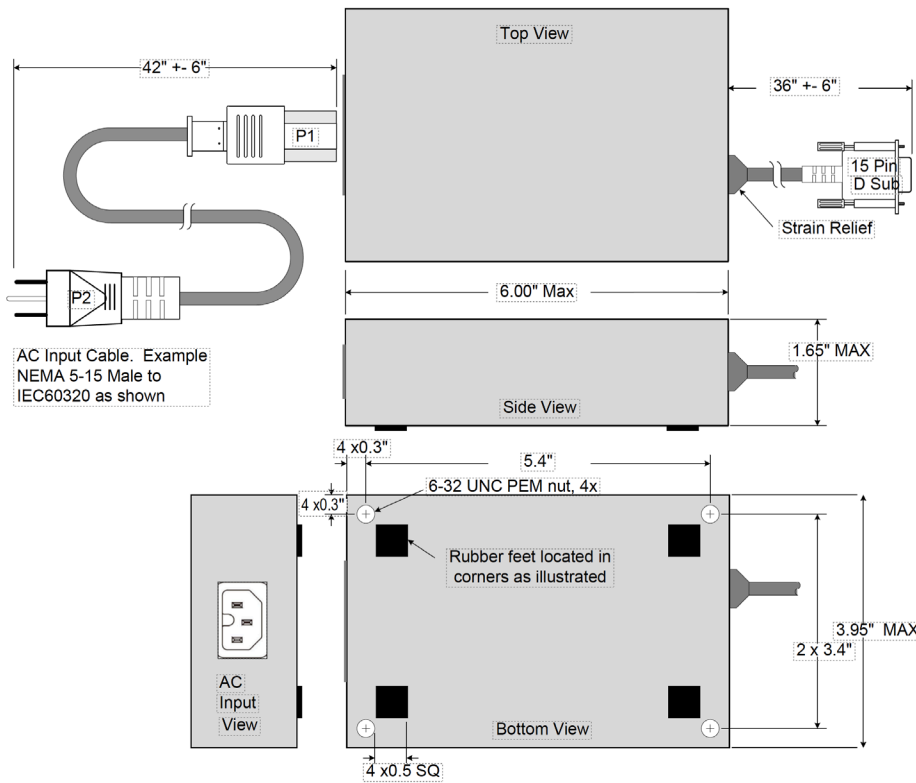
**MECHANICAL**

Physical construction Rugged metal enclosure with potting offers improved shock and vibration performance and resistance to environmental factors

Dimensions 5.91(L) X 3.94(W) X 1.61(H) INCH

AC input cable IEC60320 C16 type power entry connector that meets IP52 minimum

DC OUTPUT cable 36" +/-2", with D-Sub 15 pin connector



Part Number	AC Input Cable	
	P1	P2
RTPS80-05-02A	IEC-320 C15	NEMA 15-5P
RTPS80-05-02B	IEC-320 C15	AS/NZS 4417
RTPS80-12-02A	IEC-320 C15	NEMA 15-5P
RTPS80-12-02B	IEC-320 C15	AS/NZS 4417
RTPS80-24-02A	IEC-320 C15	NEMA 15-5P
RTPS80-24-02B	IEC-320 C15	AS/NZS 4417

Output Pin Connections			
Pin	D-Sub Type	Pin	D-Sub Type
1	Shell, Chassis Ground	9	+5VDC Return
2	+5VDC	10	+5VDC
3	+5VDC	11	+5VDC
4	+5VDC	12	+5VDC
5	+5VDC	13	+5VDC Return
6	+5VDC Return	14	+5VDC Return
7	+5VDC Return	15	+5VDC Return
8	+5VDC Return	-	-