



UNIVERSAL 48W POWER SUPPLY

RUGGEDIZED MILITARY DESIGN

RTPS48 02 Series

12/1/2016

* Designed to meet Meet FCC Part 15 Class B, CISPR22.2 Class A, **Meets MIL-STD-461-F**

*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



SPECIFICATION

MODEL		RTPS 48 series			
INPUT	Voltage and Frequency	90~264Vac, 47 ~ 63Hz			
	AC Current	1 A maximum at any input voltage range at maximum load condition			
	InrushCurrent(Typ.)	Less than 40A at 120V~240v input			
	Power Factor	Passive power factor correction, meets EN61000-3-2 CLASS A			
	Leakage Current	<0.75mA / 240VAC 60HZ			
OUPTUT	Part Number	RTPS48-12-02	RTPS48-24-02	RTPS48-28-02	
	Output Voltage	12V	24V	28V	
	Current (A) Minimum	0A	0A	0A	
	Current (A) Maximum	4A	2A	1.71A	
	Max Rated Power	48W	48W	48W	
	Voltage Initial Setting	+/- 1%			
	Combined Load/Line Regulation	Output Maximum full rated o/p, CURRENT Regulation +/-5%, From 0amps to maximum rated output current.			
	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 150mV 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			
PROTECTION	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.			
ENVIRONMENT	Operating Temperature	nominal -40 to +60°C ambient at full load Linearly de-rate output power to 70% at 70°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	0-50,000ft operating at 25C, 0-60,000ft storage			
	Vibration	Frequency 5 to 50 Hz, acceleration ±7.35 M/(S*S), direction X,Y and Z Axis			
SAFETY & EMC	Safety Standards	Compliant to UL1310 with class 2 output and UL60950 requirement			
	EMI Conduction & Radiation	Meets FCC Part 15 Class B, CISPR22.2 Class A Meets MIL-STD-461F, 102,RE102,CS101,CS114,CS115,CS116,RS103 The limits for Army Ground shall apply except where Fixed Wing External/Helicopter limit is specified per figure RE102-3 per page 104 of MIL-STD-416F dated December 2007 shall apply.			
	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			



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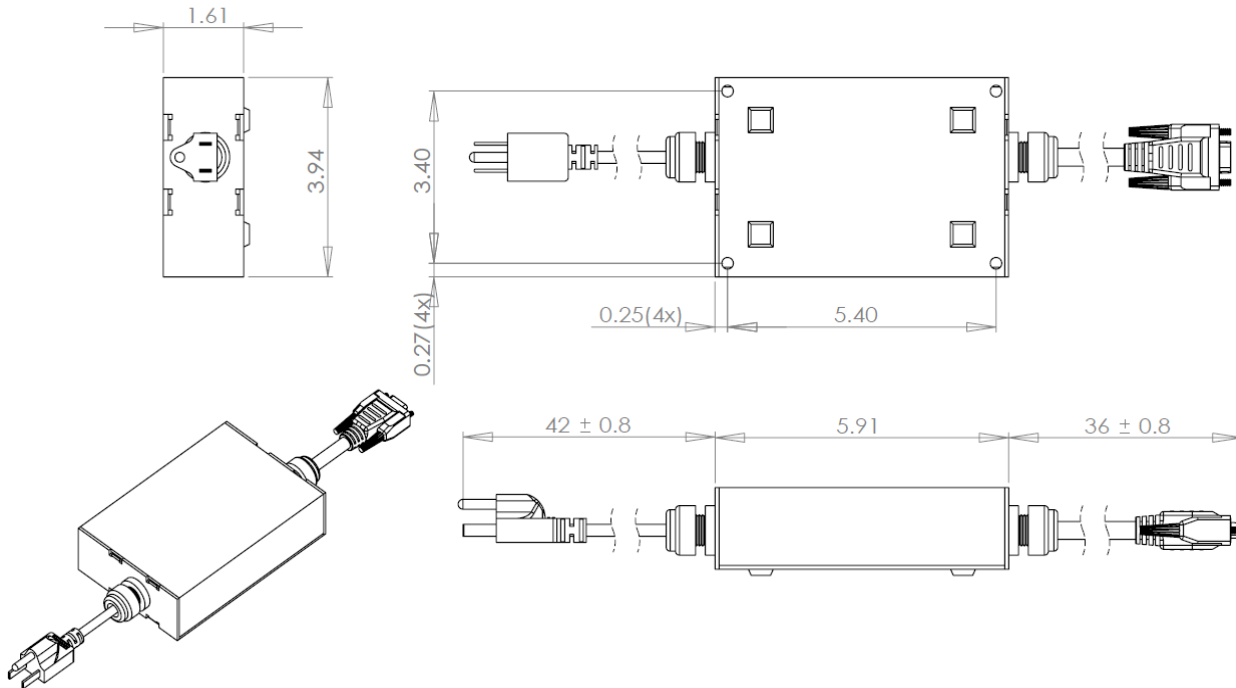
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MECHANICAL

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	36~48" Black 18AWG wires, White (Neutral), Black (Line), Green (Chassis)
DC OUTPUT cable	36" +/-2", with D-Sub 9 pin connector



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