

<h1 style="margin: 0;">UNIVERSAL 48W POWER SUPPLY</h1> <h2 style="margin: 0;">RUGGEDIZED MILITARY DESIGN</h2>	<h1 style="margin: 0;">RTPS48-XX-02UL Series</h1> <p style="margin: 0;">10/12/2021</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

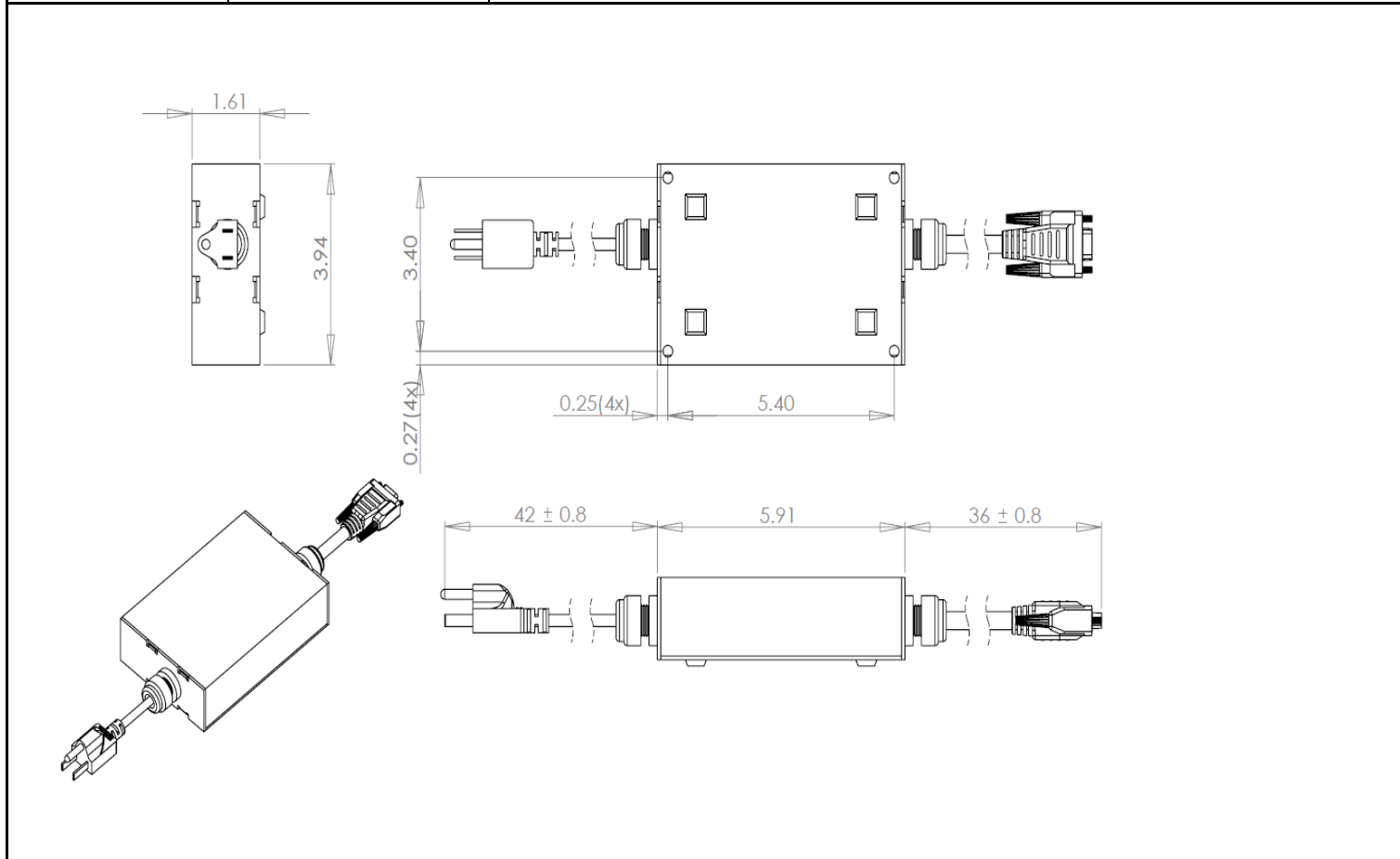


**SPECIFICATIONS**

MODEL		RTPS 48-XX-02UL 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		
	Power Factor	Passive power factor correction, meets EN61000-3-2 CLASS A		
	Leakage Current	<0.75mA / 240VAC 60HZ		
<b>OUTPUT</b>	Part Number	RTPS48-12-02UL	RTPS48-24-02UL	RTPS48-28-02UL
	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		
<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% at 70°i		
	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, RCM, CE and IEC safety requirements, including GS differences. Official qualification for each, including CB scheme and listed for UL 60950-1. Note: RCM is only available for the Australian Power Supplies with AS/NZS3112 AC Input Plugs		
	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.		
	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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<b>MECHANICAL</b>	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



Part Number	AC Input Plug	Output Pin Connections			
RTPS48-12-02A-UL	NEMA 5-15P	Pin	D-Sub Type	Pin	D-Sub Type
RTPS48-12-02B-UL	AS/NZS 3112	1	Shell, Chassis Ground	6	+12VDC Return
RTPS48-24-02A-UL	NEMA 5-15P	2	+12VDC	7	+12VDC Return
RTPS48-24-02B-UL	AS/NZS 3112	3	+12VDC	8	+12VDC Return
RTPS48-28-02A-UL	NEMA 5-15P	4	+12VDC	9	+12VDC Return
RTPS48-28-02B-UL	AS/NZS 3112	5	+12VDC		