



## DPPS™ Defense Protected Power Systems Product Specifications

### RP 2400

**Model: RP24004A**

#### Description:

Rack-style transformerless Power Purifier, 120 VAC

#### Enclosure:

Steel construction, wrinkle finish powder-coat, removable rack flanges



#### Electrical Features:

Input Connection 2 - NEMA 5-15P  
 Output Connection 4 - NEMA 5-15R  
 8 total  
 Indicators Multi-Function Power Meter  
 shows V, A, Watts, PF

#### Environment:

Storage Temp. 39° to 90° F / 4° to 32° C  
 Operating Temp. -40° to 140° F / -40° to 60° C  
 Moisture (relative humidity) 0 to 90% non-condensing

#### Electrical Ratings:

Input Voltage - Range 110 - 120VAC Single Phase (110)  
 Output Voltage 110 - 120VAC Single Phase (110)  
 Input Current (Amps) (10 Amp x 2 circuits) (110)  
 VA Rating 1200 X 2 Circuits  
 Nominal Frequency 50 to 60 Hz  
 Power Factor 0.99  
 Max Cont. Operating Voltage 150 VAC  
 EMI/RFI Emissions None (Faraday Caged Tested),  
 Performs EMI/RFI Suppression

#### NRTL Safety Listing:

Safety Standard UL 60950-1



#### Operating Temperature (Surface):

	F °	C°
No Load	Ambient*	Ambient*
Half Load	Ambient *	Ambient*
Full Load	89°	26°

\* Ambient Temp ( 79°F / 26°C)



#### Performance

Voltage Protection Rating: 330 Volts Line-Neutral, Line-Ground, Neutral-Ground  
 Electrical Mode Protection: Patented Full-Path Protection, bi-directional filtration, Normal Mode and all Common Modes  
 Harmonic Distortion Attenuation: 40% typical reduction of current THD  
 Power Factor Correction: 30% average improvement  
 EMI/RFI Filtration: Each Path (Line, Neutral, Ground) bi-directionally filtered (Patented)  
 Noise Attenuation: Over 100 dB reduction on Line and Neutral,  
 over 60 dB on Ground; Effective Range of 100 Hz - > 2 GHz  
 Electromagnetic Pulse Reduction: Blocks all unwanted current from pulses entering Line, Neutral, and Ground  
 Surge Joule Rating: Patented MagNorm technology manages surge energy, therefore the Joule rating is unlimited.  
 Suppression Strength: < 1 Event VA<sub>t</sub> (Event VA<sub>t</sub> = VA of all peak-to-peak energy during surge event); for comparison most surge suppressors allow >30,000 Event VA<sub>t</sub> Normal Mode to pass to load.  
 Duty Cycle: Tested independently to retain performance after 24 hours of constant 6000V, 3000A surges  
 No degradation to unit or load, no harmful energy to load  
 Surge Waveforms Injected under Load: IEC Combination Wave-Open-Circuit 1.2/50 and Combination Wave-Short-Circuit 8/20,  
 100kHz Ringwave per IEC 1000-4-12 ANSI C62.41  
 Actual Clamping Voltage during Surge (typical) and under load: Line-Neutral Voltage **120V RMS +/- 10V**  
 Neutral-Ground Voltage **0V RMS +/- 10V**  
 Surge Line Current **less than 0.0001 Amps over RMS**  
 Noise and Surge Rejection-Isolation: With Unit under power and an attached load under power (typical customer use), an ANSI C62.41 Cat. A pulse applied under all modes at the input, the voltage noise output will be less than 10 Volts for one microsecond, normal mode. The current noise is less than 18 amps for one microsecond, normal mode.  
 Surge Withstand Rating - MagNorm™ Performance: Severe Performance Test - 6000 Volts, 500 Amps Cat. A C62.41-1991 Ring-wave surge (at 90 degree point of input sinewave, positive charge, L1,L2/PE) injected every 45 seconds with powered loads in place for a total of over 1,260 injections in a 24 hour period - no degradation of device, loads or output performance. (see Noise and Surge Rejection-Isolation)

#### Physical Dimensions:

Product Weight 26 lbs.  
 Dimensions Height Width Depth  
 3.5 inches 19 inches 15 inches