RPS-300-12

12V



SPECIFICATION

DC VOLTAGE

MODEL



Features:

- Universal AC input / Full range
- High efficiency up to 93%
- · Built-in active PFC function
- Low leakage current<300uA
- Withstand 300VAC surge input for 5 seconds
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in 12V/0.5A auxiliary output
- 5"x3" compact size
- Medical safety approved (2 x MOPP between primary to secondary)(Note.7)
- Free air convection for 200W and 300W with 20.5 CFM forced air

RPS-300-27

27V

- · With power good and fail signal output
- · Built-in remote sense function

RPS-300-24

- No load power consumption under 0.5W by PS-ON control
- Standby 5V@1A with fan, @ 0.6A without fan
- 3 years warranty

24V

RPS-300-15

15V







RPS-300-48

48V

RATED CURRENT (20.5CFM) 25A 12.5A 11.12A 6.25A CURRENT RANGE (convection) 0 ~ 16.67A 0~13.33A 0 ~ 8.33A 0 ~ 7.4A 0 ~ 4.17A CURRENT RANGE (20.5CFM) 0 ~ 11.12A 0 ~ 25A 0 ~ 20A 0 ~ 12.5A 0 ~ 6.25A RATED POWER (convection) 200W 200W 199.9W 199.8W 200.2W RATED POWER (20.5CFM) 300W 300W 300.24W 300W OUTPUT RIPPLE & NOISE (max.) Note.2 120mVp-p 120mVp-p 150mVp-p 200mVp-p 250mVp-p **VOLTAGE ADJ. RANGE** Main output:11.4 ~ 12.6V Main output:14.25 ~ 15.75V Main output:22.8 ~ 25.2V Main output:25.65 ~ 28.35V Main output:45.6 ~ 50.4V **VOLTAGE TOLERANCE Note.3** ±3.0% ±3.0% ±2.0% ±2.0% ±2.0% LINE REGULATION ±0.5% ±0.5% ±0.5% ±0.5% ±0.5% LOAD REGULATION ±1.0% ±1.0% ±1.0% ±1.0% ±1.0% SETUP, RISE TIME 2500ms, 30ms/230VAC 3000ms, 30ms/115VAC at full load 13ms/230VAC/115VAC at full load HOLD UP TIME (Typ.) **VOLTAGE RANGE** 90 ~ 264VAC 127 ~ 370VDC Note.5 **FREQUENCY RANGE** 47 ~ 63Hz PF>0.93/230VAC PF>0.98/115VAC at full load POWER FACTOR (Typ.) INPUT 93% 93% EFFICIENCY (Typ.) 90% 90% 92.5% AC CURRENT (Typ.) 3.5A/115VAC 1.8A/230VAC **INRUSH CURRENT (Typ.)** COLD START 40A/115VAC 80A/230VAC LEAKAGE CURRENT Earth leakage current <300uA / 264VAC, Touch current <100uA/264VAC 105 ~ 135% rated output power OVERLOAD Protection type: Hiccup mode, recovers automatically after fault condition is removed 16.2 ~ 18.5V 26 ~ 30V 52 ~ 59.5V OVER VOLTAGE Protection type: Shut down o/p voltage, re-power on to recover **PROTECTION** (TSW1) detect on heatsink of power transistor 115 ± 5 °C (12V,15V),85 ±5 °C (24V,27V,48V) (TSW2) detect on heatsink of output diode OVER TEMPERATURE Protection type: (TSW1)Shut down o/p voltage, recovers automatically after temperature goes down Protection type: (TSW2)Shut down o/p voltage, re-power on to recover 5V STANDBY 5VSB: 5V@0.6A without fan, 1A with fan 20.5CFM; tolerance ± 2%, ripple: 150mVp-p(max.) **AUXILIARY POWER (AUX)** 12V@0.5A for driving a fan ; tolerance -15% ~ +10% **FUNCTION** PS-ON INPUT SIGNAL Power on: PS-ON = "Hi" or " > $\frac{1}{2}$ ~ 5V"; Power off: PS-ON = "Low" or " < 0 ~ 0.5V" POWER GOOD / POWER FAIL 500ms>PG>10ms; The TTL signal goes high with 10ms to 500ms delay after power set up; The TTL signal goes low at least 1ms before Vo below 90% of rated value WORKING TEMP. -30 ~ +70°C (Refer to "Derating Curve") 20 ~ 90% RH non-condensing **WORKING HUMIDITY** ENVIRONMENT STORAGE TEMP., HUMIDITY -40 ~ +85°C , 10 ~ 95% RH TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) VIBRATION 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes **SAFETY STANDARDS** ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved WITHSTAND VOLTAGE I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC **SAFETY &** ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH **EMC** (Note 4) **EMC EMISSION** Compliance to EN55011 (CISPR11), EN55022 (CISPR22), Conduction Class B, Radiation Class A; EN61000-3-2,-3; **EMC IMMUNITY** Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, criteria A

NOTE

OTHERS

MTBF

DIMENSION

PACKING

0.37 Kg; 36pcs/14.3Kg/1.03CUFT; 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

MIL-HDBK-217F (25°C)

- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.

160Khrs min.

127*76.2*35mm (L*W*H)

- 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 6. Heat Sink HS1, HS2 can not be shorted.
- 7. Suitable for BF application with appropriate system consideration.



