# 500W 5"×3" Reliable Green Medical Power Supply RPS-500 series

## SPECIFICATION

| | | | | | | |
|---|---|---|---|---|---|---|
| SAFETY & EMC (Note 8) | SAFETY STANDARDS | IEC60601-1, TUV EN60601-1,<br>UL ANSI / AAMI ES60601-1 (3.1 version),EAC TP TC 020.<br>CAN/CSA-C22.2 No. 60601-1:14 - Edition 3 approved;<br>Design refer to EN60335-1 (By request) | | | | |
| | ISOLATION LEVEL | Primary-Secondary: 2xMOPP, Primary-Earth:1xMOPP, Secondary-Earth:1xMOPP | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH | | | | |
| | EMC EMISSION | **Parameter** | **Standard** | **Test Level / Note** | | |
| | | Conducted emission | EN55011 (CISPR11) | Class Ⅰ : Class B , Class Ⅱ: Class A | | |
| | | Radiated emission | EN55011 (CISPR11) | Class A | | |
| | | Harmonic current | EN61000-3-2 | Class A | | |
| | | Voltage flicker | EN61000-3-3 | ----- | | |
| | EMC IMMUNITY | EN55024 , EN60601-1-2, EN61204-3 | | | | |
| | | **Parameter** | **Standard** | **Test Level / Note** | | |
| | | ESD | EN61000-4-2 | Level 4, 15KV air ; Level 4, 8KV contact | | |
| | | RF field susceptibility | EN61000-4-3 | Level 3, 10V/m( 80MHz~2.7GHz )<br>Table 9, 9~28V/m( 385MHz~5.78GHz ) | | |
| | | EFT bursts | EN61000-4-4 | Level 3, 2KV | | |
| | | Surge susceptibility | EN61000-4-5 | Level 4, 4KV/Line-FG ; 2KV/Line-Line | | |
| | | Conducted susceptibility | EN61000-4-6 | Level 3, 10V | | |
| | | Magnetic field immunity | EN61000-4-8 | Level 4, 30A/m | | |
| | | Voltage dip, interruption | EN61000-4-11 | 100% dip 1 periods, 30% dip 25 periods,<br>100% interruptions 250 periods | | |
| OTHERS | MTBF | 194.1Khrs min. MIL-HDBK-217F (25℃) | | | | |
| | DIMENSION | Type | RPS-500 | RPS-500-C | RPS-500-TF | RPS-500-SF |
| | | L*W*H | 127x76.2x40mm | 130x86x43mm | 130x86x66.5mm | 160x86x43mm |
| | | | 5″x3″x1.57″inch | 5.11″x3.39″x1.69″inch | 5.11″x3.39″x2.62″inch | 6.3″x3.39″x1.69″inch |
| | PACKING | P.W. | 0.46Kg | 0.54Kg | 0.58Kg | 0.64Kg |
| | | Q'TY | 30pcs | 24pcs | 24pcs | 24pcs |
| | | G.W. | 14.8Kg | 14Kg | 14.9Kg | 16.4Kg |
| | | M'MENT | 1.03CUFT | 0.77CUFT | 0.86CUFT | 0.91CUFT |

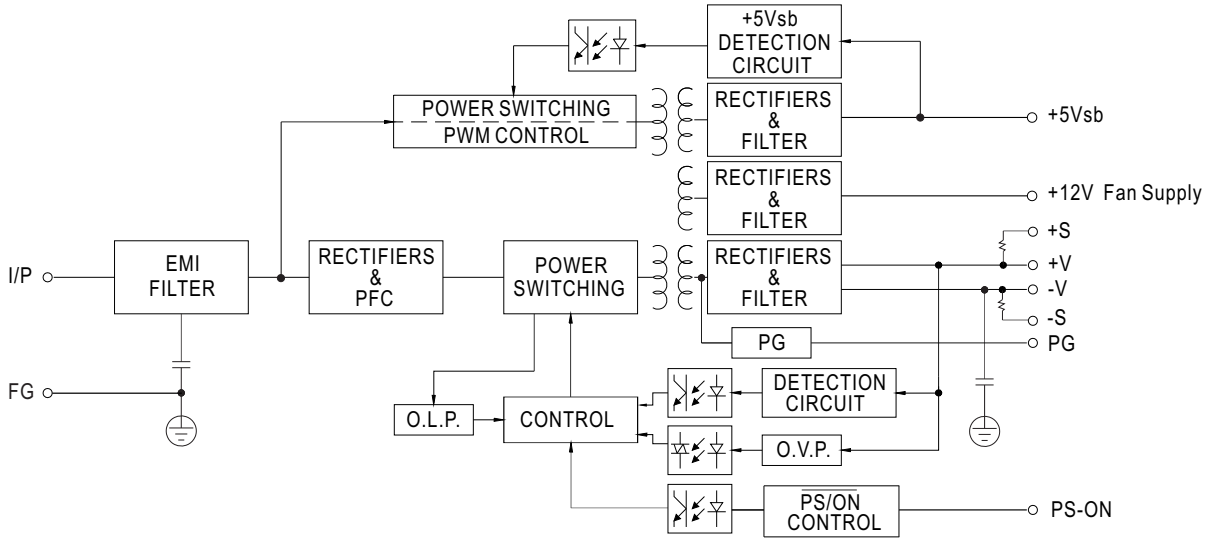
**NOTE**

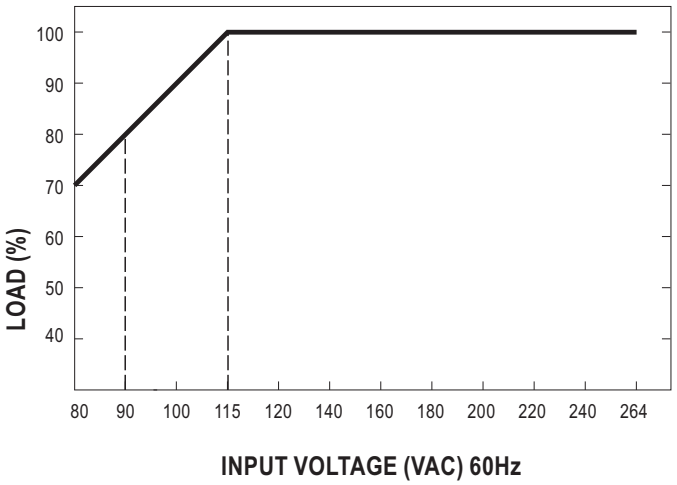
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. Touch current was measured from primary input to DC output.
6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).
7. Please refer to "Derating curve".
8. The power supply is considered a component which will be installed into a final equipment. All EMC tests are executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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).

| EMI Performance | Conducted | Radiated |
|---|---|---|
| Class Ⅰ (with FG) | Class B | Class A |
| Class Ⅱ (no FG) | Class A | Class A |

## ■ Block Diagram

PFC fosc : 90KHz
PWM fosc : 100KHz




## ■ Output Derating vs Input Voltage