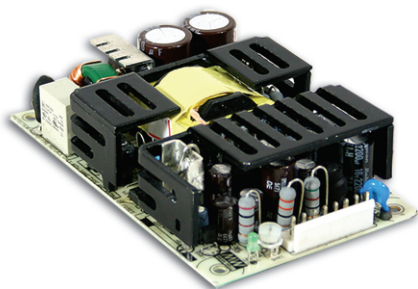




## 75W Dual Output Medical Type

## RPD-75 series



### ■ Features :

- Universal AC input/Full range
- Low leakage current<200uA
- Protections: Short circuit / Overload / Over voltage
- Free air convection for rated power and 23.5CFM forced air convection for peak load
- UL60601-1/IEC60601-1/EN60601-1 medical safety approved
- Fixed switching frequency at 65KHz
- 3 years warranty

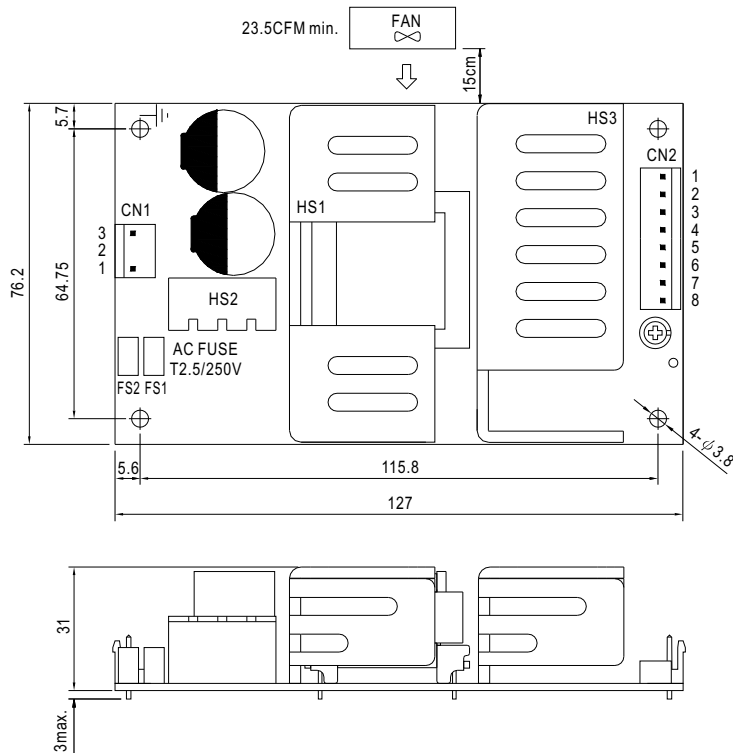


### SPECIFICATION

| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RPD-75A                                                                                                                                                   |          | RPD-75B          |            |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|------------|
| OUTPUT                   | OUTPUT NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CH1                                                                                                                                                       | CH2      | CH1              | CH2        |
|                          | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5V                                                                                                                                                        | 12V      | 5V               | 24V        |
|                          | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 7A                                                                                                                                                        | 3A       | 5A               | 2A         |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 ~ 9.5A                                                                                                                                                  | 0.3 ~ 4A | 1 ~ 6.8A         | 0.2 ~ 2.7A |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 71W                                                                                                                                                       |          | 73W              |            |
|                          | PEAK LOAD (23.5CFM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 95.5W                                                                                                                                                     |          | 98.8W            |            |
|                          | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 80mVp-p                                                                                                                                                   | 120mVp-p | 80mVp-p          | 200mVp-p   |
|                          | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CH1: 4.75 ~ 5.5V                                                                                                                                          |          | CH1: 4.75 ~ 5.5V |            |
|                          | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ±2.0%                                                                                                                                                     | ±6.0%    | ±2.0%            | ±6.0%      |
|                          | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ±0.5%                                                                                                                                                     | ±1.0%    | ±0.5%            | ±1.0%      |
|                          | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ±1.5%                                                                                                                                                     | ±3.0%    | ±1.5%            | ±3.0%      |
|                          | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 500ms, 30ms/230VAC      500ms, 30ms/115VAC at full load                                                                                                   |          |                  |            |
| HOLD UP TIME (Typ.)      | 80ms/230VAC      20ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                           |          |                  |            |
| INPUT                    | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 90 ~ 264VAC      127 ~ 370VDC                                                                                                                             |          |                  |            |
|                          | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 47 ~ 63Hz                                                                                                                                                 |          |                  |            |
|                          | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 77%                                                                                                                                                       |          | 79%              |            |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.5A/115VAC      1A/230VAC                                                                                                                                |          |                  |            |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | COLD START 25A/115VAC      50A/230VAC                                                                                                                     |          |                  |            |
|                          | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Earth leakage current <200uA / 264VAC, Patient leakage current <100uA/264VAC                                                                              |          |                  |            |
| PROTECTION               | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 140 ~ 180% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                   |          |                  |            |
|                          | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CH1: 5.75 ~ 6.75V<br>Protection type : Shut down o/p voltage, re-power on to recover                                                                      |          |                  |            |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                           |          |                  |            |
| ENVIRONMENT              | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -20 ~ +70℃ (Refer to output load derating curve)                                                                                                          |          |                  |            |
|                          | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 20 ~ 90% RH non-condensing                                                                                                                                |          |                  |            |
|                          | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -40 ~ +85℃, 10 ~ 95% RH                                                                                                                                   |          |                  |            |
|                          | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ±0.03%/℃ (0 ~ 45℃)                                                                                                                                        |          |                  |            |
|                          | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                   |          |                  |            |
| SAFETY & EMC<br>(Note 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | UL60601-1, TUV EN60601-1, IEC60601-1 approved                                                                                                             |          |                  |            |
|                          | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | I/P-O/P:4KVAC    I/P-FG:1.5KVAC    O/P-FG:1.5KVAC                                                                                                         |          |                  |            |
|                          | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                 |          |                  |            |
|                          | EMI CONDUCTION & RADIATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Compliance to EN55011 (CISPR11), EN55022 (CISPR22) Class B                                                                                                |          |                  |            |
|                          | HARMONIC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Compliance to EN61000-3-2,-3                                                                                                                              |          |                  |            |
|                          | EMS IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN60601-1-2, EN61000-6-2, EN61204-3, heavy industry level, EN61204-3 medical level, criteria A |          |                  |            |
| OTHERS                   | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 569.9K hrs min.    MIL-HDBK-217F (25℃)                                                                                                                    |          |                  |            |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 127*76.2*31mm (L*W*H)                                                                                                                                     |          |                  |            |
|                          | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.25Kg; 63pcs/16.7Kg/1.35CUFT                                                                                                                             |          |                  |            |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>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."<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>5. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.<br>6. Heat Sink HS1,HS2,HS3 can not be shorted. |                                                                                                                                                           |          |                  |            |

## Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

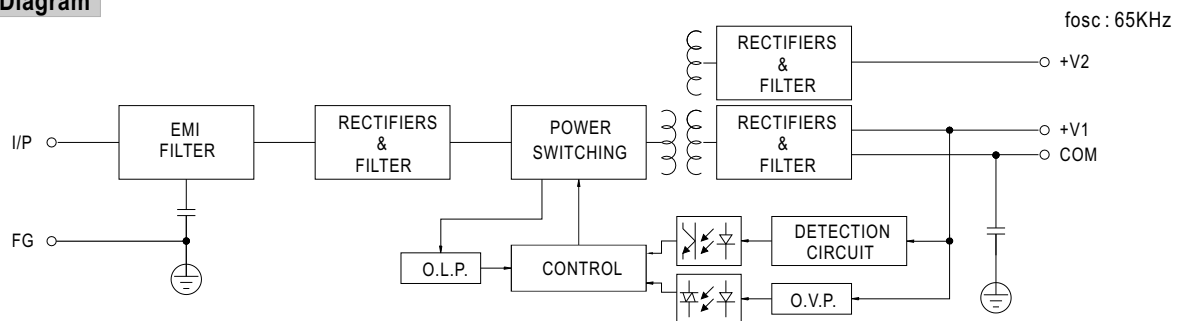
| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1       | AC/N       | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2       | No Pin     |                       |                                |
| 3       | AC/L       |                       |                                |

DC Output Connector (CN2) : JST B8P-VH or equivalent

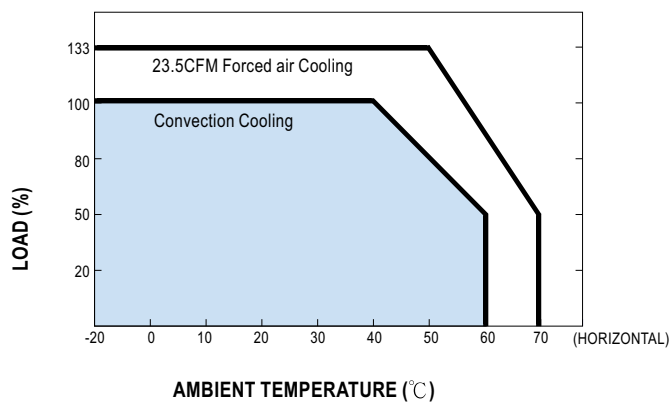
| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1,2     | V1         | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 3,4,5   | COM        |                       |                                |
| 6,7     | V2         |                       |                                |
| 8       | NC         |                       |                                |

⚠ HS1,HS2,HS3 can not be shorted

## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

