



## ■ Features :

- Universal AC input / Full range
- · Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 5"x3" compact size
- Free air convection for 110W and 160W with 20.5 CFM forced air
- Medical safety approved (2 x MOPP between primary to secondary)
- With power good and fail signal output
- Built-in remote sense function for 5~15V
- No load power consumption under 0.75W by PS-ON control (G model)
- \* Standby 5V@0.8A with fan, @0.6A without fan (G model)
- Suitable for BF application with appropriate system consideration
- 3 years warranty

G: With 5Vsb & no load power consumption < 0.75 W Blank: Basic function (without 5Vsb)

RPS G - 160 - 12







## **SPECIFICATION**

| MODEL           |  | RPS□-160-5  | RPS□-160-12            | RPS□-160-15      | RPS□-160-24  | RPS□-160-48                             |
|-----------------|--|---|------------------------|------------------|--------------|---|
|                 | DC VOLTAGE   | 5V  | 12V                    | 15V              | 24V          | 48V                                     |
| ОИТРИТ          | RATED CURRENT (20.5CFM)  | 30A   | 12.9A                  | 10.3A            | 6.5A         | 3.25A                                   |
|                 | CURRENT RANGE (convection)   | 0 ~ 20A   | 0~9.1A                 | 0 ~ 7.3A         | 0 ~ 4.6A     | 0 ~ 2.3A                                |
|                 | CURRENT RANGE (20.5CFM)  | 0 ~ 30A   | 0 ~ 12.9A              | 0 ~ 10.3A        | 0 ~ 6.5A     | 0 ~ 3.25A                               |
|                 | RATED POWER (convection) Note.7  | 103W  | 112.2W                 | 112.5W           | 113.4W       | 113.4W                                  |
|                 | RATED POWER (20.5CFM) Note.8   | 155W  | 159.8W                 | 159.5W           | 161W         | 161W                                    |
|                 | RIPPLE & NOISE (max.) Note.2   | 100mVp-p  | 100mVp-p               | 120mVp-p         | 150mVp-p     | 250mVp-p                                |
|                 | VOLTAGE ADJ. RANGE   | CH1:4.5 ~ 5.5V  | CH1:10.8 ~ 13.2V       | CH1:13.5 ~ 16.5V | CH1:22 ~ 27V | CH1:43.2 ~ 52.8V                        |
|                 | VOLTAGE TOLERANCE Note.3   | ±4.0%   | ±3.0%                  | ±3.0%            | ±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   | 1800ms, 30ms/230VAC 3500ms, 30ms/115VAC at full load  |                        |                  |              |   |
|                 | HOLD UP TIME (Typ.)  | 16ms/230VAC/115VAC at full load   |                        |                  |              |   |
|                 | VOLTAGE RANGE Note.6   | 90 ~ 264VAC 127 ~ 370VDC  |                        |                  |              |   |
|                 | FREQUENCY RANGE  | 47 ~ 63Hz   |                        |                  |              |   |
|                 | POWER FACTOR (Typ.)  | PF>0.93/230VAC  | PF>0.98/115VAC at full | load             |              |   |
| INPUT           | EFFICIENCY (Typ.)  | 85%   | 87%                    | 87%              | 87%          | 88%                                     |
|                 | AC CURRENT (Typ.)  | 2A/115VAC 1.1A/2  | 230VAC                 | <u> </u>         |              |   |
|                 | INRUSH CURRENT (Typ.)  | COLD START 35A/115VAC 70A/230VAC  |                        |                  |              |   |
|                 | LEAKAGE CURRENT Note.9   |   |                        |                  |              |   |
| PROTECTION      |  | 105 ~ 135% rated output power   |                        |                  |              |   |
|                 | OVERLOAD   | Protection type: Hiccup mode, recovers automatically after fault condition is removed   |                        |                  |              |   |
|                 | OVER VOLTAGE   | 5.75 ~ 6.75V  | 13.8 ~ 16.2V           | 17.25 ~ 20.25V   | 27.6 ~ 32.4V | 55.2 ~ 64.8V                            |
|                 |  | Protection type : Shut d  |                        |                  |              | 1 |
|                 |  | 110°C(5V),105°C (12V,15V,24V,48V) (TSW1 : detect on heatsink of power transistor)   |                        |                  |              |   |
|                 | OVER TEMPERATURE   | 95°C (5V),90°C (12V,15V,24V,48V) (TSW2 : detect on heatsink of power transistor)  |                        |                  |              |   |
|                 |  | 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 (G model)   | 5VSB: 5V@0.6A without fan, 0.8A with fan 20.5CFM; tolerance ± 2%, ripple: 50mVp-p(max.)   |                        |                  |              |   |
| FUNCTION        | PS-ON INPUT SIGNAL (G model)   | Power on: PS-ON = "Hi" or " > 2 ~ 5V"; Power off: PS-ON = "Low" or " < 0 ~ 0.5V"  |                        |                  |              |   |
|                 | POWER GOOD / POWER FAIL  | ·   |                        |                  |              |   |
|                 | REMOTE SENSE   | 5~15V   |                        |                  |              |   |
| ENVIRONMENT     | WORKING TEMP.  | -20 ~ +70°C (Refer to "Derating Curve")   |                        |                  |              |   |
|                 | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing  |                        |                  |              |   |
|                 | 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 &        | SAFETY STANDARDS   | ANSI/AAMI ES60601-1, TUV EN60601-1 approved   |                        |                  |              |   |
|                 | 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. O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |                        |                  |              |   |
| EMC<br>(Note 4) | EMC EMISSION   | Compliance to EN55011 (CISPR11), EN55022 (CISPR22) Class B, EN61000-3-2,-3  |                        |                  |              |   |
|                 | EMC IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3, medical level, criteria A  |                        |                  |              |   |
| OTHERS          | MTBF   |   |                        |                  |              |   |
|                 | DIMENSION  | 230.5K hrs min. MIL-HDBK-217F (25°C)  |                        |                  |              |   |
|                 | PACKING  | 127*76.2*34.6mm (L*W*H) 0.32Kg; 36pcs/12.5Kg/0.79CUFT   |                        |                  |              |   |
| NOTE            | All parameters NOT specia     Ripple & noise are measure     Tolerance : includes set up | July mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. tolerance, line regulation and load regulation.  Interest a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets |                        |                  |              |   |

- 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)
- (as available on http://www.inteatiweii.com/)
  5. HS1,HS2 & HS3 can not be shorted.
  6. Derating may be needed under low input voltages. Please check the derating curve for more details.
  7. The rated power includes 5Vsb @ 0.6A.
  8. The rated power includes 5Vsb @ 0.8A.
  9. Touch current was measured from primary input to DC output.



