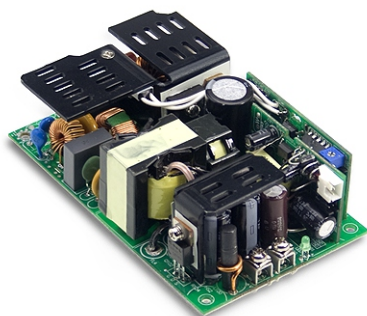




## ■ Features :

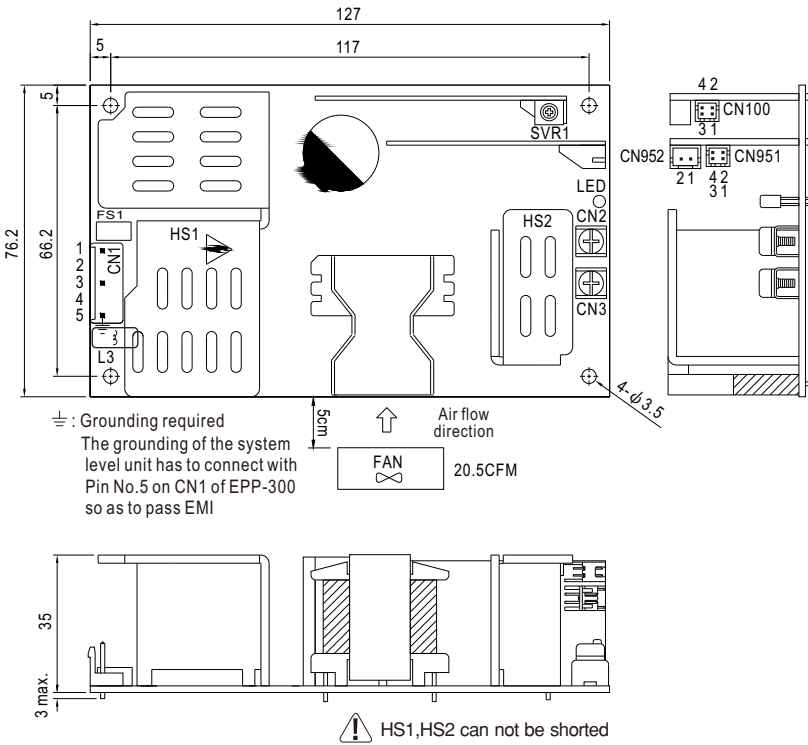
- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 93%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in 12V/0.5A auxiliary output
- 5"x3" compact size
- Free air convection for 200W and 300W with 20.5 CFM forced air
- With power good and fail signal output
- Built-in remote sense function
- No load power consumption under 0.5W by PS-ON control
- Standby 5V@1A with fan, @ 0.6A without fan
- 3 years warranty



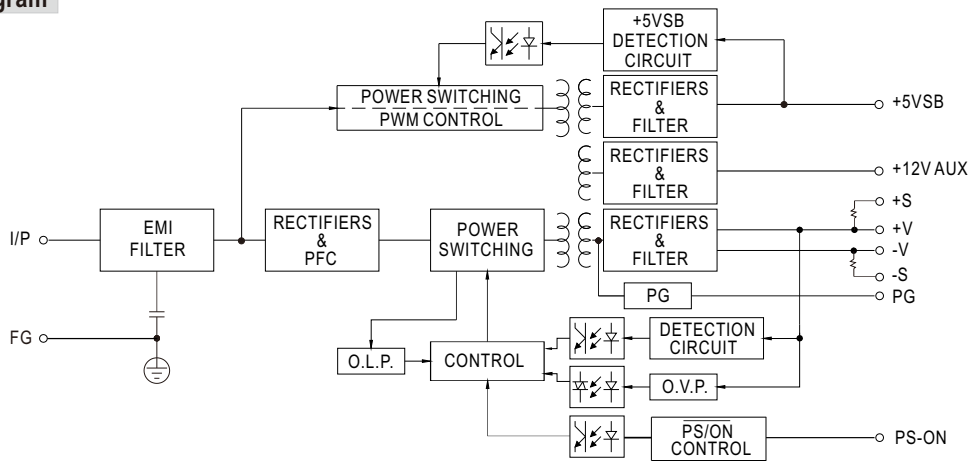
## SPECIFICATION

| MODEL                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | EPP-300-12                                                                                                                                                     | EPP-300-15                 | EPP-300-24               | EPP-300-27                 | EPP-300-48               |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|----------------------------|--------------------------|
| OUTPUT                | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 12V                                                                                                                                                            | 15V                        | 24V                      | 27V                        | 48V                      |
|                       | RATED CURRENT (20.5CFM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 25A                                                                                                                                                            | 20A                        | 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 ~ 25A                                                                                                                                                        | 0 ~ 20A                    | 0 ~ 12.5A                | 0 ~ 11.12A                 | 0 ~ 6.25A                |
|                       | RATED POWER (convection)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 200W                                                                                                                                                           | 200W                       | 199.9W                   | 199.8W                     | 200.2W                   |
|                       | RATED POWER (20.5CFM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 300W                                                                                                                                                           | 300W                       | 300W                     | 300.24W                    | 300W                     |
|                       | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                |                            |                          |                            |                          |
| HOLD UP TIME (Typ.)   | 13ms/230VAC/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                |                            |                          |                            |                          |
| INPUT                 | VOLTAGE RANGE Note.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 90 ~ 264VAC      127 ~ 370VDC                                                                                                                                  |                            |                          |                            |                          |
|                       | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 47 ~ 63Hz                                                                                                                                                      |                            |                          |                            |                          |
|                       | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PF>0.93/230VAC      PF>0.98/115VAC at full load                                                                                                                |                            |                          |                            |                          |
|                       | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 90%                                                                                                                                                            | 90%                        | 92.5%                    | 93%                        | 93%                      |
|                       | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.5A/115VAC      1.8A/230VAC                                                                                                                                   |                            |                          |                            |                          |
|                       | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | COLD START 40A/115VAC      80A/230VAC                                                                                                                          |                            |                          |                            |                          |
|                       | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <2mA/240VAC                                                                                                                                                    |                            |                          |                            |                          |
| PROTECTION            | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                        |                            |                          |                            |                          |
|                       | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 13.5 ~ 15V                                                                                                                                                     | 16.2 ~ 18.5V               | 26 ~ 30V                 | 29.5 ~ 33.5V               | 52 ~ 59.5V               |
|                       | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Protection type : Shut down o/p voltage, re-power on to recover                                                                                                |                            |                          |                            |                          |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 110℃±5℃ (TSW1) detect on heatsink of power transistor                                                                                                          |                            |                          |                            |                          |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 115±5℃ (12V,15V),85±5℃ (24V,27V,48V) (TSW2) detect on heatsink of output diode                                                                                 |                            |                          |                            |                          |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Protection type : (TSW1)Shut down o/p voltage, recovers automatically after temperature goes down                                                              |                            |                          |                            |                          |
| FUNCTION              | 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%                                                                                                             |                            |                          |                            |                          |
|                       | PS-ON INPUT SIGNAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Power on: PS-ON = "Hi" or " > 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 |                            |                          |                            |                          |
| ENVIRONMENT           | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -30 ~ +70℃ (Refer to "Derating Curve")                                                                                                                         |                            |                          |                            |                          |
|                       | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 20 ~ 90% RH non-condensing                                                                                                                                     |                            |                          |                            |                          |
|                       | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -40 ~ +85℃ , 10 ~ 95% RH                                                                                                                                       |                            |                          |                            |                          |
|                       | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ±0.03%/℃ (0 ~ 50℃ )                                                                                                                                            |                            |                          |                            |                          |
|                       | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                                   |                            |                          |                            |                          |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | UL60950-1, TUV EN60950-1 approved                                                                                                                              |                            |                          |                            |                          |
|                       | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                                                                      |                            |                          |                            |                          |
|                       | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                      |                            |                          |                            |                          |
|                       | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Compliance to EN55011 (CISPR11), EN55022 (CISPR22),Conduction Class B,Radiation Class A;EN61000-3-2,3;                                                         |                            |                          |                            |                          |
| OTHERS                | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, criteria A                                                                                       |                            |                          |                            |                          |
|                       | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 160Khrs min. MIL-HDBK-217F (25℃ )                                                                                                                              |                            |                          |                            |                          |
|                       | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 127*76.2*35mm (L*W*H)                                                                                                                                          |                            |                          |                            |                          |
|                       | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.37 Kg; 36pcs/14.3Kg/1.03CUFT;                                                                                                                                |                            |                          |                            |                          |
| 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. Derating may be needed under low input voltages. Please check the derating curve for more details.<br>6. Heat Sink HS1,HS2 can not be shorted. |                                                                                                                                                                |                            |                          |                            |                          |

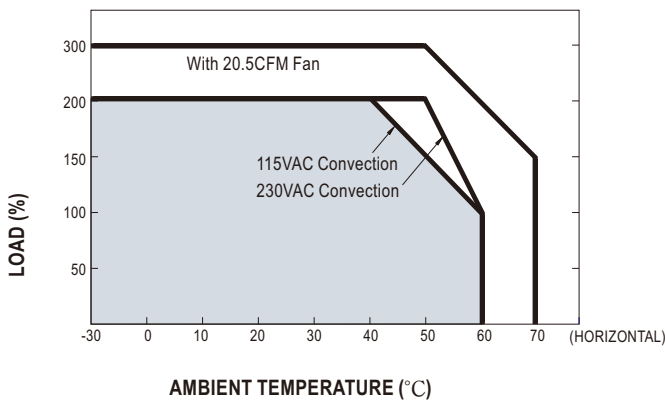
## Mechanical Specification



## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

