

- 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
 - Operating altitude up to 5000 meters
 - 3 years warranty



■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

SPECIFICATION



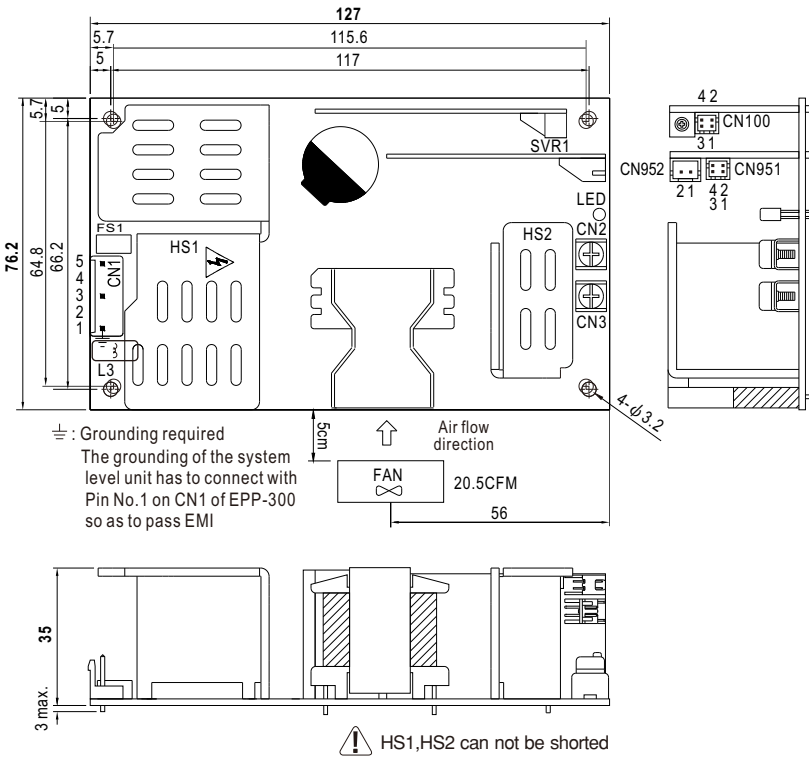
| MODEL | EPP-300-12 | EPP-300-15 | EPP-300-24 | EPP-300-27 | EPP-300-48 | |
|-----------------------|--|--|-----------------------------|--------------------------|----------------------------|--------------------------|
| OUTPUT | DC VOLTAGE | 12V | 15V | 24V | 27V | 48V |
| | RATED CURRENT (20.5CFM) | 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 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 | 115°C ±5°C (TSW1) detect on heatsink of power transistor | | | | |
| | | 115 ±5°C (12V,15V), 100 ±5°C (24V,27V,48V) (TSW2) detect on heatsink of output diode 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 | | | | |
| 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% at main output 20% rated current (20.5CFM) | | | | |
| | PS-ON INPUT SIGNAL | Power on: PS-ON = "Hi" or " > 2 ~ 5V" ; Power off: PS-ON = "Low" or " < 0 ~ 0.5V" | | | | |
| ENVIRONMENT | POWER GOOD / POWER FAIL | 500ms>PG>10ms ; The TTL signal goes high with 10ms to 500ms delay after power set up ; The TTL signal goes low at least 1ms before Vo below 90% of rated value | | | | |
| | WORKING TEMP. | -30 ~ +70°C (Refer to "Derating Curve") | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C , 10 ~ 95% RH | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | | | |
| | OPERATING ALTITUDE Note.7 | 5000 meters | | | | |
| SAFETY & EMC (Note 4) | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | |
| | SAFETY STANDARDS | UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 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°C / 70% RH | | | | |
| | EMC EMISSION | Compliance to BS EN/EN55032 (CISPR32), Conduction Class B, Radiation Class B; BS EN/EN61000-3-2,3; EAC TP TC 020 | | | | |
| OTHERS | EMC IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN60601-1-2, EAC TP TC 020 | | | | |
| | MTBF | 1490.1K hrs min. Telcordia SR-332 (Bellcore) ; 160.3K hrs min. MIL-HDBK-217F (25°C) | | | | |
| | DIMENSION | 127*76.2*35mm (L*W*H) | | | | |
| NOTE | PACKING | 0.37 Kg; 36pcs/14.3Kg/0.96CUFT; | | | | |
| | | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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)</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. Heat Sink HS1, HS2 can not be shorted.</p> <p>7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | | |



300W Single Output with PFC Function

EPP-300 series

Mechanical Specification



Unit:mm

AC Input Connector (CN1) : JST B5P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | FG ⚡ | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2,4 | No Pin | | |
| 3 | AC/L | | |
| 5 | AC/N | | |

DC Output Connector (CN2,CN3)

| Pin No. | Assignment | Output Terminals |
|---------|------------|----------------------------------|
| CN2 | -V | M3.5 Pan HD screw in 2 positions |
| CN3 | +V | Torque to 8 lbs-in(90cNm)max. |

Function Connector(CN100):HRS DF11-4DP-2DS or equivalent

| Pin No. | Status | Mating Housing | Terminal |
|---------|--------|----------------------------|-----------------------------|
| 1 | -S | HRS DF11-4DS or equivalent | HRS DF11-**SC or equivalent |
| 2 | +S | | |
| 3 | DC COM | | |
| 4 | PG | | |

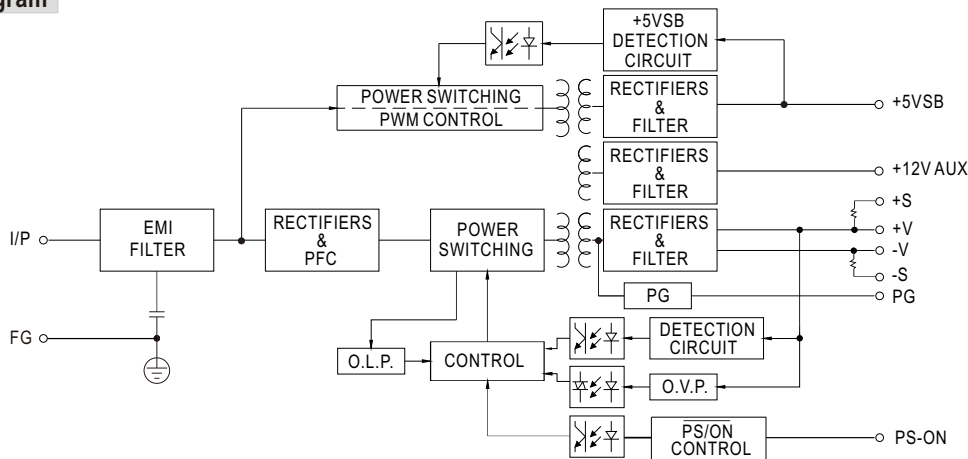
Function Connector(CN951):HRS DF11-4DP-2DS or equivalent

| Pin No. | Status | Mating Housing | Terminal |
|---------|--------|----------------------------|-----------------------------|
| 1 | 5VSB | HRS DF11-4DS or equivalent | HRS DF11-**SC or equivalent |
| 2,4 | DC COM | | |
| 3 | PS-ON | | |

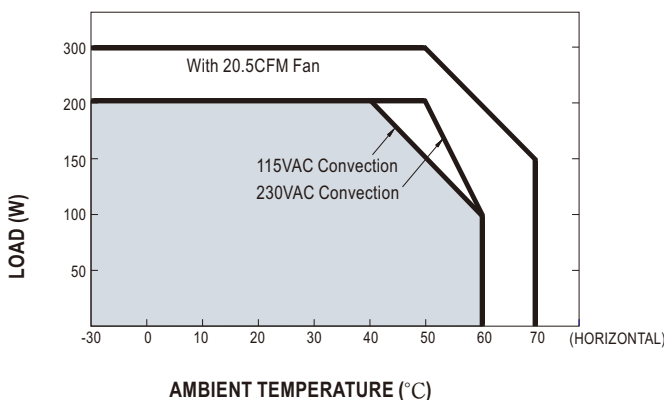
FAN Connector(CN952) : JST S2B-XH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|---------------------------------|
| 1 | DC COM | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2 | +12V | | |

Block Diagram



Derating Curve



Output Derating VS Input Voltage

