



■ Features :

- 4"x2" Compact size
- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 92.5%
- Protections: Short circuit / Overload / Over voltage/Over temperature
- 75W free air convection, 100W with 20CFM forced air
- LED indicator for power on
- No load power consumption<0.5W
- Built-in 12V/0.3A auxiliary output
- 3 years warranty



■ GTIN CODE

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

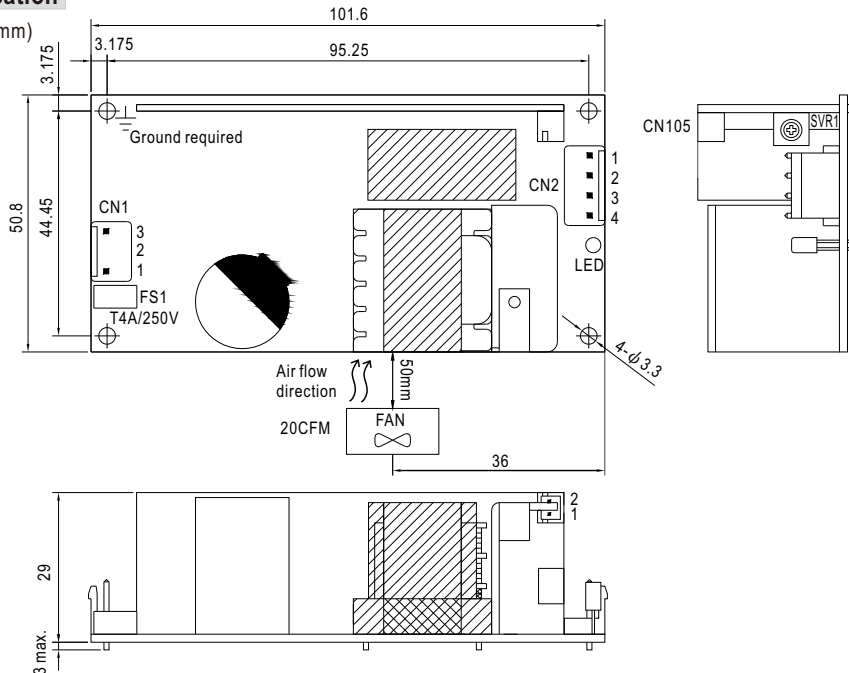


SPECIFICATION

| MODEL                 | EPP-100-12  | EPP-100-15  | EPP-100-24    | EPP-100-27    | EPP-100-48     |               |
|-----------------------|---|---|---------------|---------------|----------------|---------------|
| OUTPUT                | DC VOLTAGE  | 12V   | 15V           | 24V           | 27V            | 48V           |
|                       | RATED CURRENT (convection)  | 6.3A  | 5A            | 3.2A          | 2.8A           | 1.6A          |
|                       | RATED CURRENT (20CFM FAN)   | 8.5A  | 6.67A         | 4.2A          | 3.71A          | 2.1A          |
|                       | CURRENT RANGE (convection)  | 0 ~ 6.3A  | 0 ~ 5A        | 0 ~ 3.2A      | 0 ~ 2.8A       | 0 ~ 1.6A      |
|                       | CURRENT RANGE (20CFM FAN)   | 0 ~ 8.5A  | 0 ~ 6.67A     | 0 ~ 4.2A      | 0 ~ 3.71A      | 0 ~ 2.1A      |
|                       | RATED POWER (convection)  | 75.6W   | 75W           | 76.8W         | 75.6W          | 76.8W         |
|                       | RATED POWER (20CFM FAN)   | 102W  | 100.05W       | 100.8W        | 100.17W        | 100.8W        |
|                       | RIPPLE & NOISE (max.) Note.2  | 120mVp-p  | 150mVp-p      | 240mVp-p      | 240mVp-p       | 300mVp-p      |
|                       | VOLTAGE ADJ. RANGE  | 11.76 ~ 12.6V   | 14.7 ~ 15.75V | 23.52 ~ 25.2V | 26.46 ~ 28.35V | 47.04 ~ 50.4V |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%   | ±2.0%         | ±1.0%         | ±1.0%          | ±1.0%         |
|                       | 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      | 1000ms, 30ms/230VAC      2000ms, 30ms/115VAC at full load   |   |               |               |                |               |
| HOLD UP TIME (Typ.)   | 16ms/230VAC      16ms/115VAC at full load   |   |               |               |                |               |
| INPUT                 | VOLTAGE RANGE Note.5  | 90 ~ 264VAC      127 ~ 370VDC   |               |               |                |               |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |               |               |                |               |
|                       | POWER FACTOR (Typ.)   | PF>0.95/230VAC      PF>0.98/115VAC at full load   |               |               |                |               |
|                       | EFFICIENCY (Typ.)   | 91%   | 91%           | 92%           | 92.5%          | 92.5%         |
|                       | AC CURRENT (Typ.)   | 1.4A/115VAC      0.7A/230VAC  |               |               |                |               |
|                       | INRUSH CURRENT (Typ.)   | COLD START 70A/230VAC   |               |               |                |               |
|                       | LEAKAGE CURRENT   | <2mA/240VAC   |               |               |                |               |
| PROTECTION            | OVER LOAD   | 105 ~ 145% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |               |               |                |               |
|                       | OVER VOLTAGE  | 13.2 ~ 15.6V  | 16.83 ~ 19.5V | 27.7 ~ 31.5V  | 30.2 ~ 34.05V  | 51.3 ~ 62.7V  |
|                       | OVER TEMPERATURE  | 110°C ± 10°C (RTH2), 110°C ± 5°C (TSW2)<br>Protection type : Shut down o/p voltage, re-power on to recover              |               |               |                |               |
| FUNCTION              | AUXILIARY POWER(AUX)  | 12V@0.3A for driving a fan, tolerance ± 10% at main output 100% load  |               |               |                |               |
| ENVIRONMENT           | 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 ~ 45°C)  |               |               |                |               |
|                       | OPERATING ALTITUDE Note.6   | 2000 meters   |               |               |                |               |
| SAFETY & EMC (Note 4) | 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/ 500VDC / 25°C/ 70% RH   |               |               |                |               |
|                       | EMC EMISSION  | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020                                      |               |               |                |               |
|                       | EMC IMMUNITY  | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, heavy industry level, EAC TP TC 020                        |               |               |                |               |
| OTHERS                | MTBF  | 2401.7K hrs min.    Telcordia SR-332 (Bellcore) ; 249.6K hrs min.    MIL-HDBK-217F (25°C)                               |               |               |                |               |
|                       | DIMENSION   | 101.6*50.8*29mm (L*W*H)   |               |               |                |               |
|                       | PACKING   | 0.2Kg; 72pcs/15.4Kg/0.82CUFT  |               |               |                |               |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F 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. (as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. 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 <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |   |               |               |                |               |

**Mechanical Specification**

(Unit: mm , tolerance  $\pm 1$ mm)



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

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

⊕ : Grounding required

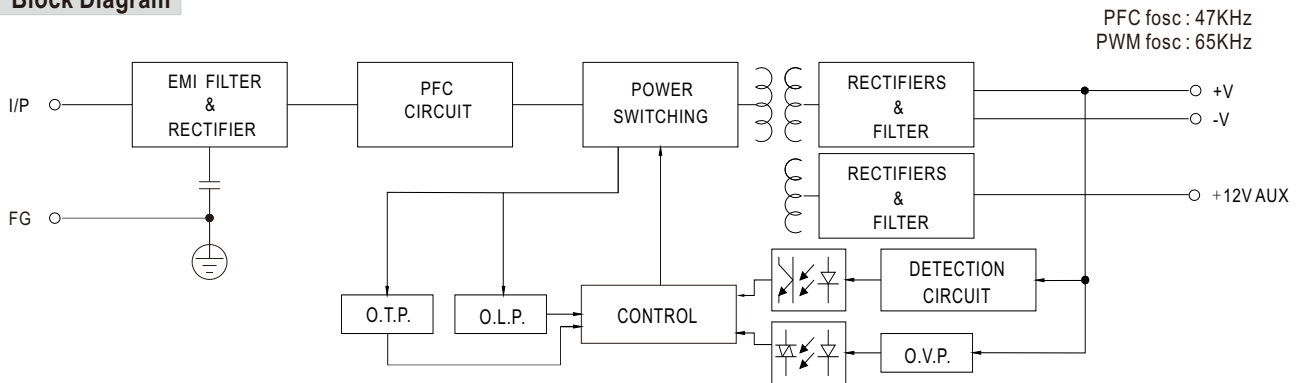
DC Output Connector (CN2) : JST B4P-VH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1,2     | DC COM     | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 3,4     | +V         |                       |                                |

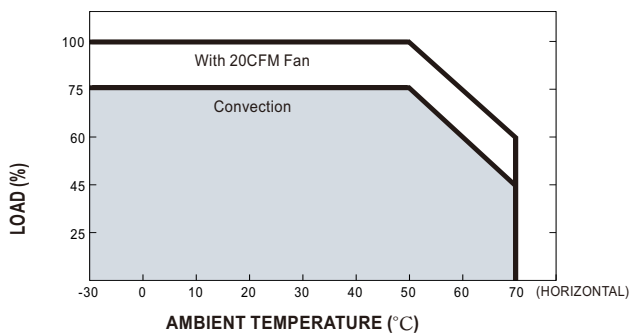
FAN Connector(CN105) : JST B2B-PH-K-S or equivalent

| Pin No. | Assignment | Mating Housing          | Terminal                         |
|---------|------------|-------------------------|----------------------------------|
| 1       | DC COM     | JST PHR-2 or equivalent | JST SPH-002T-P0.5S or equivalent |
| 2       | +12V       |                         |                                  |

**Block Diagram**



**Output Derating**



**Output Derating VS Input Voltage**

