

■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fix switching frequency at 134KHz
- 3 years warranty

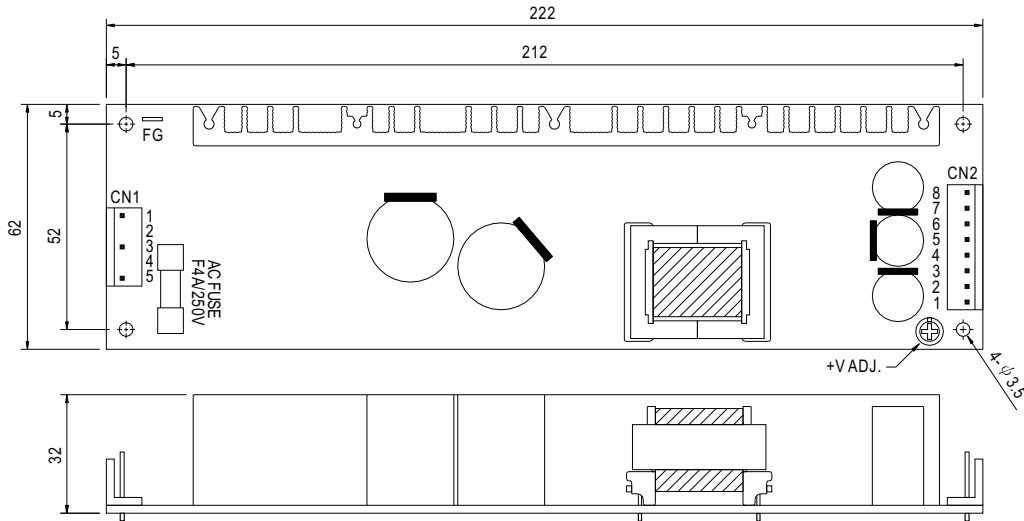


SPECIFICATION

| MODEL                  | LPS-100-3.3  | LPS-100-5  | LPS-100-7.5  | LPS-100-12                       | LPS-100-13.5 | LPS-100-15   | LPS-100-24 | LPS-100-27       | LPS-100-48   |              |  |
|------------------------|--|--|--------------|----------------------------------|--------------|--------------|------------|------------------|--------------|--------------|--|
| OUTPUT                 | DC VOLTAGE   | 3.3V   | 5V           | 7.5V                             | 12V          | 13.5V        | 15V        | 24V              | 27V          | 48V          |  |
|                        | RATED CURRENT  | 20A  | 20A          | 13.3A                            | 8.4A         | 7.5A         | 6.7A       | 4.2A             | 3.8A         | 2.1A         |  |
|                        | CURRENT RANGE  | 0 ~ 20A  | 0 ~ 20A      | 0 ~ 13.3A                        | 0 ~ 8.4A     | 0 ~ 7.5A     | 0 ~ 6.7A   | 0 ~ 4.2A(6A 10s) | 0 ~ 3.8A     | 0 ~ 2.1A     |  |
|                        | RATED POWER  | 66W  | 100W         | 99.75W                           | 100.8W       | 101.25W      | 100.5W     | 100.8W(144W 10s) | 102.6W       | 100.8W       |  |
|                        | RIPPLE & NOISE (max.) Note.2   | 150mVp-p   | 100mVp-p     | 100mVp-p                         | 100mVp-p     | 100mVp-p     | 100mVp-p   | 150mVp-p         | 150mVp-p     | 200mVp-p     |  |
|                        | VOLTAGE ADJ. RANGE   | 3 ~ 3.6V   | 4.5 ~ 5.7V   | 6 ~ 9V                           | 10 ~ 13.2V   | 12 ~ 15V     | 13.5 ~ 18V | 20 ~ 26.4V       | 26 ~ 32V     | 41 ~ 56V     |  |
|                        | VOLTAGE TOLERANCE Note.3   | ±3.0%  | ±3.0%        | ±2.0%                            | ±2.0%        | ±2.0%        | ±2.0%      | ±1.0%            | ±1.0%        | ±1.0%        |  |
|                        | LINE REGULATION  | ±0.5%  | ±0.5%        | ±0.5%                            | ±0.5%        | ±0.5%        | ±0.5%      | ±0.5%            | ±0.5%        | ±0.5%        |  |
|                        | LOAD REGULATION  | ±2.0%  | ±2.0%        | ±1.5%                            | ±1.5%        | ±1.5%        | ±1.5%      | ±0.5%            | ±0.5%        | ±0.5%        |  |
| SETUP, RISE, HOLD TIME | 800ms, 50ms, 20ms/230VAC      1200ms, 50ms, 20ms/115VAC at full load   |  |              |                                  |              |              |            |                  |              |              |  |
| INPUT                  | VOLTAGE RANGE  | 88 ~ 132VAC / 176 ~ 264VAC auto switch      248 ~ 370VDC   |              |                                  |              |              |            |                  |              |              |  |
|                        | FREQUENCY RANGE  | 47 ~ 63Hz  |              |                                  |              |              |            |                  |              |              |  |
|                        | EFFICIENCY(Typ.)   | 69%  | 77%          | 77%                              | 79%          | 79%          | 80%        | 80%              | 81%          | 81%          |  |
|                        | AC CURRENT   | 2.3A/115VAC  |              | 1.5A/230VAC                      |              |              |            |                  |              |              |  |
|                        | INRUSH CURRENT(max.)   | COLD START 30A/115VAC  |              | 60A/230VAC                       |              |              |            |                  |              |              |  |
| LEAKAGE CURRENT        | <1mA / 240VAC  |  |              |                                  |              |              |            |                  |              |              |  |
| PROTECTION             | OVER LOAD  | 105 ~ 140% (+24V: above 6.5A) rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |                                  |              |              |            |                  |              |              |  |
|                        | OVER VOLTAGE   | 3.8 ~ 4.45V  | 5.75 ~ 6.75V | 9.4 ~ 10.9V                      | 13.8 ~ 16.2V | 15.5 ~ 18.2V | 18 ~ 21V   | 27.6 ~ 32.4V     | 33.7 ~ 39.2V | 57.6 ~ 67.2V |  |
| ENVIRONMENT            | WORKING TEMP.  | -10 ~ +60°C (Refer to output load derating curve)  |              |                                  |              |              |            |                  |              |              |  |
|                        | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |              |                                  |              |              |            |                  |              |              |  |
|                        | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH   |              |                                  |              |              |            |                  |              |              |  |
|                        | TEMP. COEFFICIENT  | ±0.05%/°C (0 ~ 50°C)   |              |                                  |              |              |            |                  |              |              |  |
|                        | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes   |              |                                  |              |              |            |                  |              |              |  |
| SAFETY & EMC (Note 4)  | SAFETY STANDARDS   | UL1950, TUV EN60950 Approved   |              |                                  |              |              |            |                  |              |              |  |
|                        | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC  |              | I/P-FG:1.5KVAC    O/P-FG:0.5KVAC |              |              |            |                  |              |              |  |
|                        | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC   |              |                                  |              |              |            |                  |              |              |  |
|                        | EMI CONDUCTION & RADIATION   | Compliance to EN55022 (CISPR22) Class B  |              |                                  |              |              |            |                  |              |              |  |
|                        | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3   |              |                                  |              |              |            |                  |              |              |  |
| OTHERS                 | MTBF   | 203.6Khrs min.    MIL-HDBK-217F (25°C)   |              |                                  |              |              |            |                  |              |              |  |
|                        | DIMENSION  | 222*62*32mm (L*W*H)  |              |                                  |              |              |            |                  |              |              |  |
|                        | PACKING  | 0.45Kg; 24pcs/12.5Kg/1.76CUFT  |              |                                  |              |              |            |                  |              |              |  |
| NOTE                   | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>5. If the input range 85V-89V, the output load is changed from 0A-rated load, There will be reduced 20V for 1second (LPS-100-24).</li> <li>6. Mounting holes M1 and M2 should be grounded for EMI purposes.</li> </ol> |  |              |                                  |              |              |            |                  |              |              |  |

■ Mechanical Specification

Unit:mm



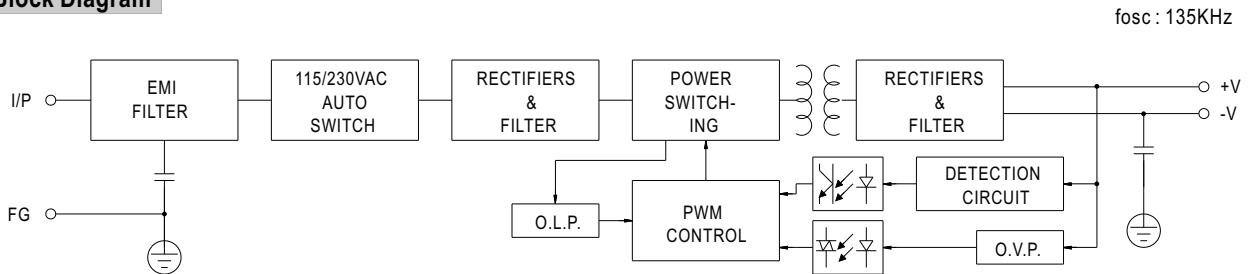
AC Input Connector (CN1) : JST B5P-VH or equivalent

| 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/N       |                       |                                |
| 5       | AC/L       |                       |                                |

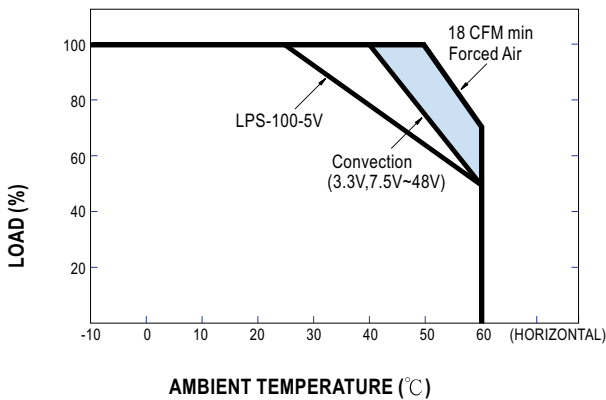
DC Output Connector (CN2) : JST B8P-VH or equivalent

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

■ Block Diagram



■ Output Derating



■ Static Characteristics (12V)

