



■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 90%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage
- Protections: Over temperature (optional)
- Cooling by free air convection
- 1U low profile 38mm
- Medical safety approved (MOOP level)
- Built-in remote ON-OFF control
- No load power consumption<0.5W
- All using 105°C long life electrolytic capacitors
- 5 years warranty

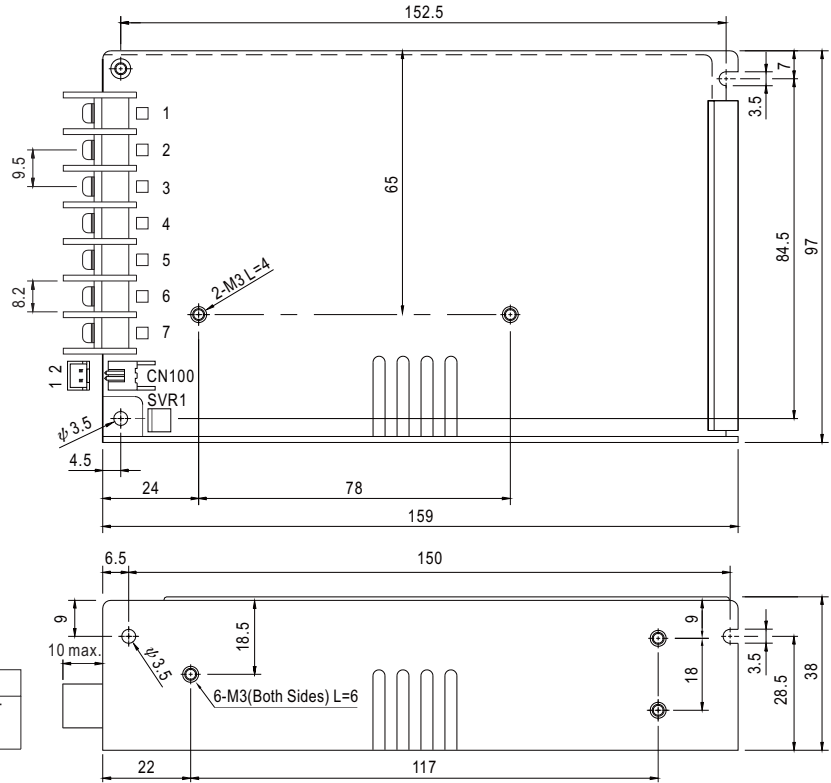


**SPECIFICATION**

| MODEL                 |   | MSP-100-3.3   | MSP-100-5   | MSP-100-7.5                 | MSP-100-12   | MSP-100-15   | MSP-100-24   | MSP-100-36   | MSP-100-48   |  |
|-----------------------|---|---|-------------|-----------------------------|--------------|--------------|--------------|--------------|--------------|--|
| OUTPUT                | DC VOLTAGE  | 3.3V  | 5V          | 7.5V                        | 12V          | 15V          | 24V          | 36V          | 48V          |  |
|                       | RATED CURRENT   | 20A   | 17A         | 13.5A                       | 8.5A         | 7A           | 4.5A         | 2.9A         | 2.2A         |  |
|                       | CURRENT RANGE   | 0 ~ 20A   | 0 ~ 17A     | 0 ~ 13.5A                   | 0 ~ 8.5A     | 0 ~ 7A       | 0 ~ 4.5A     | 0 ~ 2.9A     | 0 ~ 2.2A     |  |
|                       | RATED POWER   | 66W   | 85W         | 101.3W                      | 102W         | 105W         | 108W         | 104.4W       | 105.6W       |  |
|                       | RIPPLE & NOISE (max.) Note.2  | 80mVp-p   | 80mVp-p     | 100mVp-p                    | 120mVp-p     | 150mVp-p     | 150mVp-p     | 200mVp-p     | 240mVp-p     |  |
|                       | VOLTAGE ADJ. RANGE  | 3.1 ~ 3.8V  | 4.75 ~ 5.8V | 7.1 ~ 9V                    | 11.4 ~ 13.8V | 14.25 ~ 18V  | 22.8 ~ 28.8V | 34.2 ~ 39.6V | 45.6 ~ 55.2V |  |
|                       | VOLTAGE TOLERANCE Note.3  | +2.5,-3.5%  | +2.5,-3.5%  | ±2.5%                       | ±1.5%        | ±1.5%        | ±1.5%        | ±1.5%        | ±1.5%        |  |
|                       | LINE REGULATION   | ±0.5%   | ±0.5%       | ±0.5%                       | ±0.3%        | ±0.3%        | ±0.2%        | ±0.2%        | ±0.2%        |  |
|                       | LOAD REGULATION   | ±2.0%   | ±2.0%       | ±1.5%                       | ±0.8%        | ±0.8%        | ±0.5%        | ±0.5%        | ±0.5%        |  |
|                       | SETUP, RISE TIME  | 2500ms, 100ms/230VAC      2500ms, 100ms/115VAC at full load   |             |                             |              |              |              |              |              |  |
| HOLD UP TIME (Typ.)   | 50ms/230VAC      20ms/115VAC at full load   |   |             |                             |              |              |              |              |              |  |
| INPUT                 | VOLTAGE RANGE Note.5  | 85 ~ 264VAC      120 ~ 370VDC   |             |                             |              |              |              |              |              |  |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |             |                             |              |              |              |              |              |  |
|                       | POWER FACTOR (Typ.)   | PF>0.95/230VAC  |             | PF>0.98/115VAC at full load |              |              |              |              |              |  |
|                       | EFFICIENCY (Typ.)   | 78%   | 83%         | 84%                         | 87.5%        | 88%          | 88.5%        | 89%          | 90%          |  |
|                       | AC CURRENT (Typ.)   | 1.2A/115VAC      0.6A/230VAC  |             |                             |              |              |              |              |              |  |
|                       | INRUSH CURRENT (Typ.)   | 35A/115VAC      65A/230VAC  |             |                             |              |              |              |              |              |  |
| PROTECTION            | LEAKAGE CURRENT Note.6  | Earth leakage current < 300 $\mu$ A/264VAC , Touch leakage current < 100 $\mu$ A/264VAC   |             |                             |              |              |              |              |              |  |
|                       | OVERLOAD  | 105 ~ 135% rated output power<br>Protection type : Constant current limiting for Vo=50 ~ 100% of rated voltage, recovers automatically after fault condition is removed |             |                             |              |              |              |              |              |  |
|                       | OVER VOLTAGE  | 3.96 ~ 4.62V  | 6 ~ 7V      | 9.4 ~ 10.9V                 | 14.4 ~ 16.8V | 18.8 ~ 21.8V | 30 ~ 34.8V   | 41.4 ~ 48.6V | 57.6 ~ 67.2V |  |
|                       | OVER TEMPERATURE  | Shut down o/p voltage, recovers automatically after temperature goes down   |             |                             |              |              |              |              |              |  |
| FUNCTION              | REMOTE CONTROL  | RC+/RC- : 0 ~ 0.8V= power on ; 4 ~ 10V = power off  |             |                             |              |              |              |              |              |  |
| ENVIRONMENT           | WORKING TEMP.   | -40 ~ +60°C (Refer to "Derating Curve")   |             |                             |              |              |              |              |              |  |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |             |                             |              |              |              |              |              |  |
|                       | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH  |             |                             |              |              |              |              |              |  |
|                       | TEMP. COEFFICIENT   | ±0.04%/°C (0 ~ 50°C)  |             |                             |              |              |              |              |              |  |
|                       | VIBRATION   | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes  |             |                             |              |              |              |              |              |  |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | ANSI/AAMI ES60601-1, IEC60601-1 approved  |             |                             |              |              |              |              |              |  |
|                       | ISOLATION LEVEL   | Primary-Secondary: 2×MOOP, Primary-Earth: 1×MOOP, Secondary-Earth: 1×MOOP   |             |                             |              |              |              |              |              |  |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:4KVAC    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 EN55011 (CISPR11) Class B, EN61000-3-2,-3   |             |                             |              |              |              |              |              |  |
| OTHERS                | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN60601-1-2   |             |                             |              |              |              |              |              |  |
|                       | MTBF  | 295.7K hrs min.    MIL-HDBK-217F (25°C)   |             |                             |              |              |              |              |              |  |
|                       | DIMENSION   | 159*97*38mm (L*W*H)   |             |                             |              |              |              |              |              |  |
| NOTE                  | PACKING   | 0.38Kg; 24pcs/10.1Kg/0.76CUFT   |             |                             |              |              |              |              |              |  |
|                       | <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 0.1uf &amp; 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. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. Touch current was measured from primary input to DC output.</p> <p>7. When the input voltage is less than 40VAC, the SPS may exhibit degradation of performance. The final product manufacturers must re-confirm this deviation that does not affect basic safety or essential performance.</p> |   |             |                             |              |              |              |              |              |  |

■ Mechanical Specification

Case No.901I Unit:mm



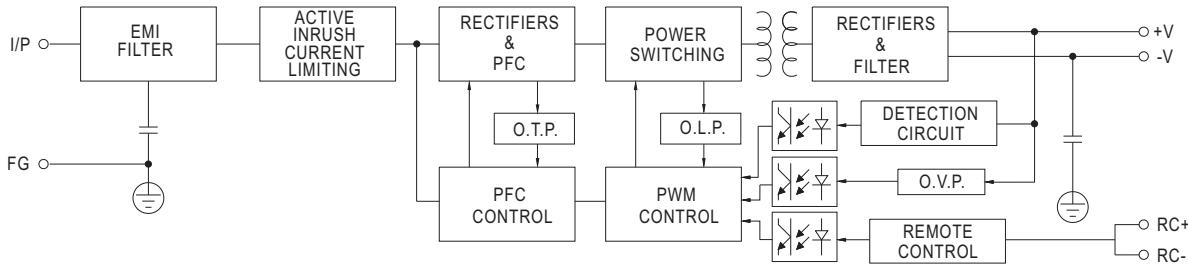
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4,5     | DC OUTPUT -V |
| 2       | AC/N       | 6,7     | DC OUTPUT +V |
| 3       | FG         |         |              |

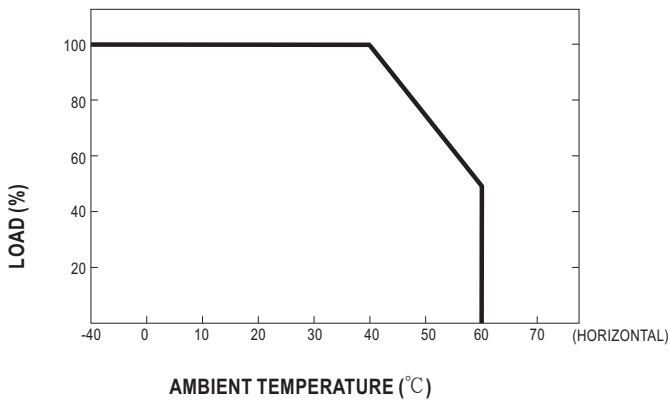
Remote ON/OFF (CN100) : JST B-XH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                   |
|---------|------------|-----------------------|----------------------------|
| 1       | RC-        | JST XHP or equivalent | JST SXH-001T or equivalent |
| 2       | RC+        |                       |                            |

■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

