



■ 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



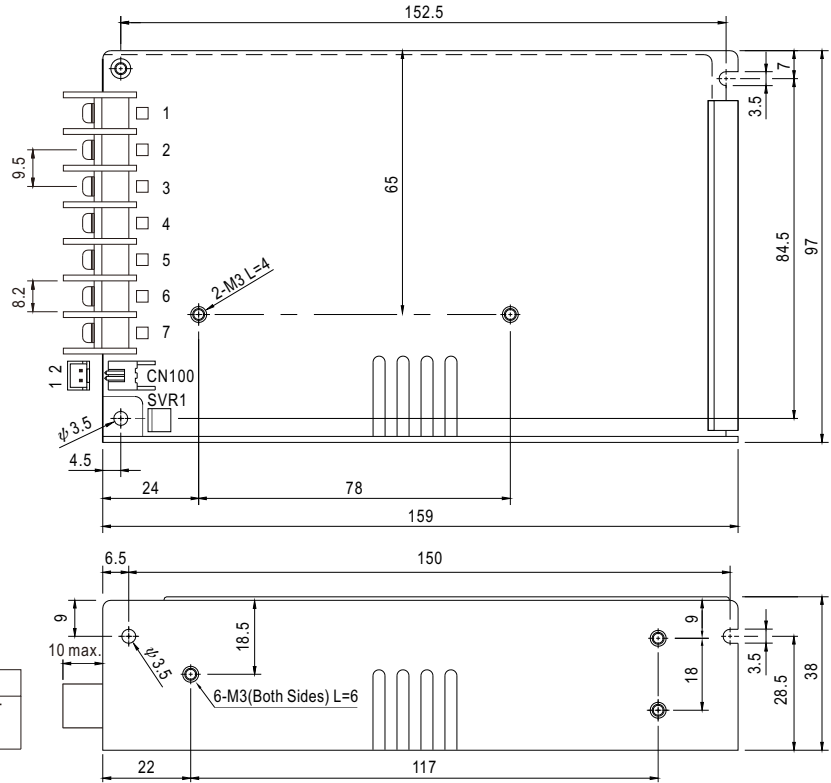
ANSI/AAMI ES60601-1 IEC60601-1 TPTC004

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 μ A/264VAC , Touch leakage current < 100 μ A/264VAC | | | | | | | | |
| | OVERLOAD | 105 ~ 135% rated output power 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, EAC TP TC 004 approved | | | | | | | | |
| | ISOLATION LEVEL | Primary-Secondary: 2xMOOP, Primary-Earth: 1xMOOP, Secondary-Earth: 1xMOOP | | | | | | | | |
| | 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 BS EN/EN55011 (CISPR11) 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/EN60601-1-2, EAC TP TC 020 | | | | | | | | |
| | MTBF | 295.7K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 159*97*38mm (L*W*H) | | | | | | | | |
| NOTE | PACKING | 0.38Kg; 24pcs/10.1Kg/0.9CUFT | | | | | | | | |
| | <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. 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 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. 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> <p>8. 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> | | | | | | | | | |

■ Mechanical Specification

Case No.901I Unit:mm



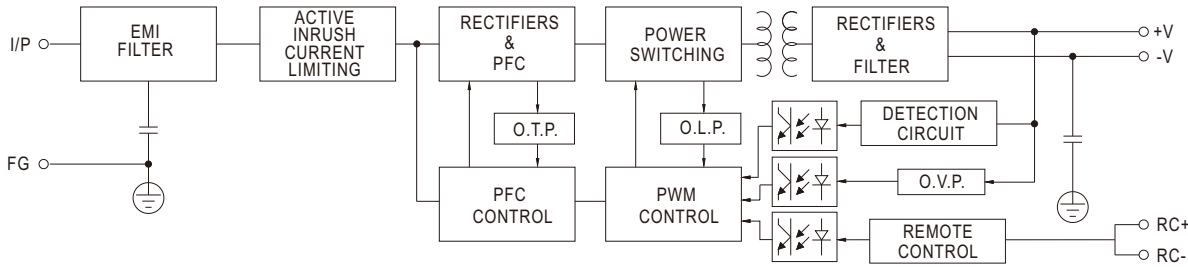
Terminal Pin No. Assignment

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

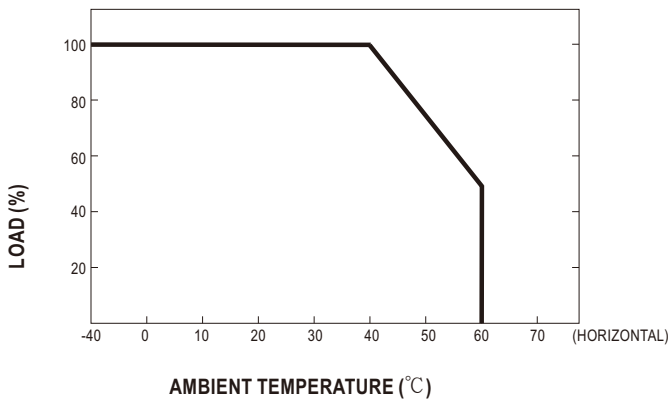
Remote ON/OFF (CN100) : JST B-XH or equivalent

| 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

