

SPECIFICATION



■ 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 (Note.6)
- All using 105°C long life electrolytic capacitors
- 5 years warranty



MODEL MSP-100-36 MSP-100-48 MSP-100-3.3 MSP-100-5 MSP-100-7.5 MSP-100-12 MSP-100-15 MSP-100-24 DC VOLTAGE 3.3V 7.5V 12V 15V 24V 36V 48V RATED CURRENT 17A 13.5A 8.5A 7A 2.9A 2.2A **CURRENT RANGE** 0 ~ 20A 0 ~ 17A $0 \sim 13.5A$ 0 ~ 8.5A 0 ~ 7A 0~45A 0 ~ 2.9A 0 ~ 2.2A RATED POWER 101 3W 102W 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 OUTPUT **VOLTAGE ADJ. RANGE** 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 31~38 **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 20ms/115VAC at full load HOLD UP TIME (Typ.) 50ms/230VAC **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 INPUT EFFICIENCY (Typ.) 83% 87.5% 88 5% 89% 90% 78% 84% 88% AC CURRENT (Typ.) 1 2A/115VAC 0.6A/230VAC **INRUSH CURRENT (Typ.)** 35A/115VAC 65A/230VAC LEAKAGE CURRENT Note.7 Earth leakage current < 300μ A/264VAC , Touch leakage current < 100μ A/264VAC 105 ~ 135% rated output power OVERLOAD Protection type: Constant current limiting for Vo=50 ~ 100% of rated voltage, recovers automatically after fault condition is removed 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 VOLTAGE **PROTECTION** Protection type: Shut down o/p voltage, re-power on to recover 90° C (3.3V ~ 7.5V) , 85° C (12V ~ 48V) (TSW1 : detect on heatsink Q101 of power transistor)(optional) **OVER TEMPERATURE** Protection type: Shut down o/p voltage, recovers automatically after temperature goes down **FUNCTION** REMOTE CONTROL RC+/RC-: $0 \sim 0.8V$ = power on; $4 \sim 10V$ = power off -40 ~ +60°C (Refer to "Derating Curve") WORKING TEMP. 20 ~ 90% RH non-condensing **WORKING HUMIDITY** ENVIRONMENT -40 ~ +85°C, 10 ~ 95% RH STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT ±0.04%/°C (0 ~ 50°C) **VIBRATION** 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes SAFETY STANDARDS ANSI/AAMI ES60601-1, IEC60601-1 approved WITHSTAND VOLTAGE I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC **SAFETY &** ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH **EMC** (Note 4) **EMC EMISSION** Compliance to EN55011 (CISPR11) Class B, EN61000-3-2,-3 **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) **OTHERS DIMENSION** 159*97*38mm (L*W*H) **PACKING** 0.38Kg; 24pcs/10.1Kg/0.76CUFT 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25% of ambient temperature. NOTE 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. 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)
- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 6. No load power consumption<0.5W when RC+ & RC- (CN100 pin1,2) 0 ~ 8V or short.
- Touch current was measured from primary input to DC output.
- 8. 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.



