

## 100W Single Output Medical Type

## MSP-100 series



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  $^\circ\!\mathrm{C}$  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
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V
OUTPUT	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%	±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		500ms, 100ms/11					
	HOLD UP TIME (Typ.)	50ms/230VAC 20ms/115VAC at full load							
INPUT		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/230VA		01.070	0070	00.070	0070	5070
	INRUSH CURRENT (Typ.)	35A/115VAC 65A/230VAC							
	LEAKAGE CURRENT Note.7								
	LEARAGE CORRENT Note./	105 ~ 135% rated output power							
PROTECTION	OVERLOAD	Protection type : Constant current limiting for Vo=50 ~ 100% of rated voltage, recovers automatically after fault condition is remove							
		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 ~ 67.2
	OVER VOLTAGE						30 ~ 34.00	41.4~40.00	57.0 ~ 07.20
		Protection type : Shut down o/p voltage, re-power on to recover							
FUNCTION	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down RC+/RC-: 0 ~ 0.8V= power on ; 4 ~ 10V = power off							
FUNCTION	REMOTE CONTROL	$-40 \sim +60^{\circ}C$ (Refer to "Derating Curve")							
ENVIRONMENT	WORKING TEMP.								
	WORKING HUMIDITY	20~90% RH non-condensing							
	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							
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
EMC	ISOLATION RESISTANCE	1/P-O/P, 1/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
(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							
OTHERS	MTBF	295.7K hrs mir	. MIL-HDBK	-217F (25℃)					
	DIMENSION	159*97*38mm	(L*W*H)						
	PACKING	0.38Kg; 24pcs/	10.1Kg/0.76CU	-T					
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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)</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>No load power consumption-0.5W when RC+ &amp; RC- (CN100 pin1,2) 0 ~ 8V or short.</li> <li>Toch current was measured from primary input to DC output.</li> <li>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.</li> </ol>								



## MSP-100 series

