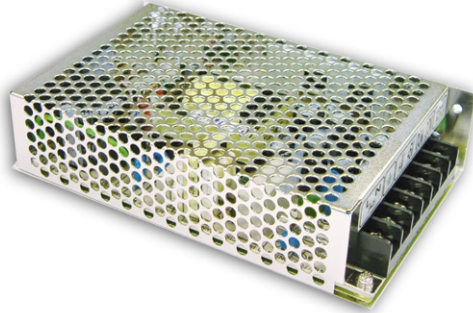


# 100W Single Output Switching Power Supply

# NES-100 series



### ■ Features :

- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- 2 years warranty



## SPECIFICATION

MODEL	NES-100-5	NES-100-7.5	NES-100-9	NES-100-12	NES-100-15	NES-100-24	NES-100-48	
OUTPUT	DC VOLTAGE	5V	7.5V	9V	12V	15V	24V	48V
	RATED CURRENT	20A	13.6A	11.2A	8.5A	7A	4.5A	2.3A
	CURRENT RANGE	0 ~ 20A	0 ~ 13.6A	0 ~ 11.2A	0 ~ 8.5A	0 ~ 7A	0 ~ 4.5A	0 ~ 2.3A
	RATED POWER	100W	102W	100.8W	102W	105W	108W	110.4W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	7.13 ~ 8.3V	8.55 ~ 9.9V	11.4 ~ 13.2V	14.25 ~ 16.5V	22.8 ~ 26.4V	45.6 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION Note.5	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms/230VAC      1000ms, 20ms/115VAC at full load						
HOLD UP TIME (Typ.)	30ms/230VAC      25ms/115VAC at full load							
INPUT	VOLTAGE RANGE	85 ~ 132VAC / 176 ~ 264VAC selected by switch			248 ~ 373VDC			
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	80%	81%	81%	83%	84%	86%	86%
	AC CURRENT (Typ.)	2A/115VAC		1.2A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 45A						
	LEAKAGE CURRENT	<2mA / 240VAC						
PROTECTION	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	5.75 ~ 6.75V	8.6 ~ 10.1V	10.4 ~ 12.2V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	55.2 ~ 64.8V
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")						
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 7)	SAFETY STANDARDS Note.6	UL60950-1, CB(IEC60950-1),BSMI (CNS14336-1),CCC GB4943.1:2011 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    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 EN55032 (CISPR32) Class B, EN61000-3-2,-3						
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-1, light industry level, criteria A						
OTHERS	MTBF	320.7Khrs min.    MIL-HDBK-217F (25°C)						
	DIMENSION	159*97*38mm (L*W*H)						
	PACKING	0.55Kg; 30pcs/17.5Kg/0.97CUFT						
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. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 0% to 100% rated load.</li> <li>6. For the request of GB4943.1,the power supply is only suitable for use in the altitude 2000m below and the non tropical climate condition.</li> <li>7. 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> </ol>							

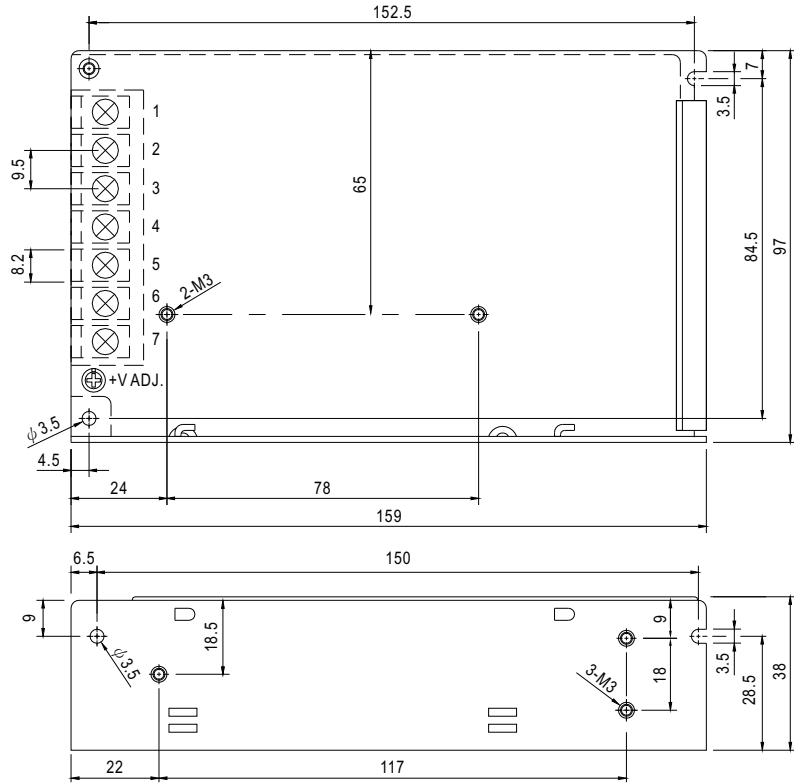
File Name: NES-100-SPEC 2017-07-14



Note: all features are subject to change without notice.

**Mechanical Specification**

Case No. 901 Unit:mm

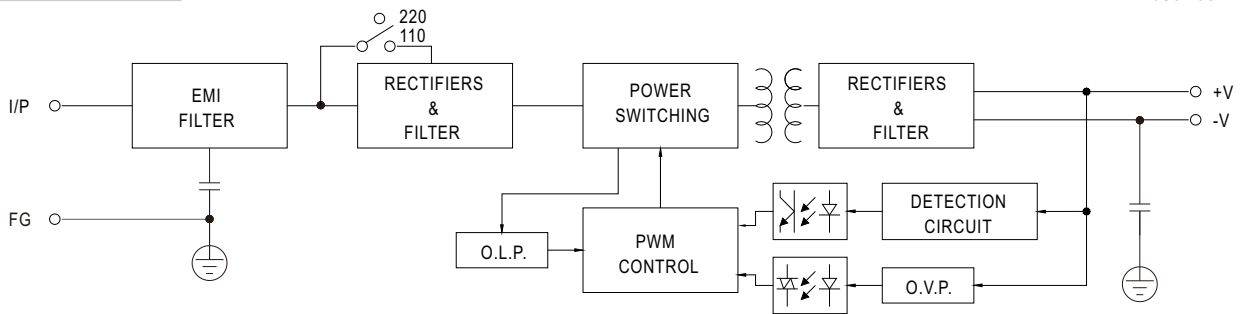


Terminal Pin No. Assignment

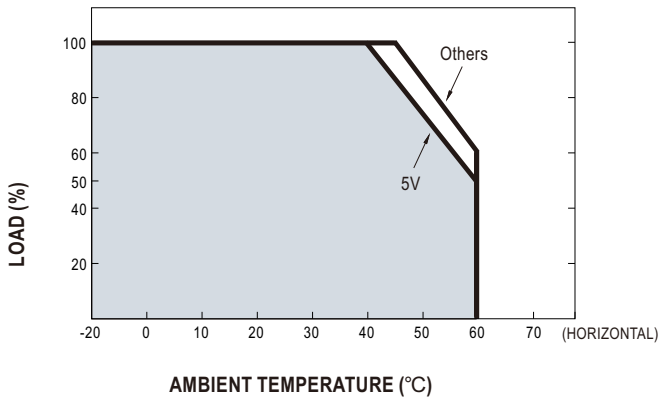
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG $\perp$		

**Block Diagram**

fosc : 60KHz



**Derating Curve**



**Static Characteristics**

