

CONTROLLERS & TRANSFORMERS

IMPACT LIGHTING INC'S POWER SUPPLY - 50W

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

APPLICATION

- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment



UL **CCC** **CB** **CE**

SPECIFICATION

MODEL	NES-50-5N	ES-50-12	NES-50-15	NES-50-24	NES-50-48
OUTPUT	DC VOLTAGE	5V	12V1	5V	24V4
	RATED CURRENT	10A	4.2A	3.4A	2.2A
	CURRENT RANGE	0 ~ 10A	0 ~ 4.2A	0 ~ 3.4A	0 ~ 2.2A
	RATED POWER	50W	50.4W	51W	52.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION Note.5	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	500ms, 30ms/230VAC	1200ms, 30ms/115VAC at full load		
INPUT	HOLD UP TIME (Typ.)	50ms/230VAC	10ms/115VAC at full load		
	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	79%8	82%	3%	86%8
	AC CURRENT (Typ.)	1.1A/115VAC	0.65A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 45A			
PROTECTION	LEAKAGE CURRENT	<2mA / 240VAC			
	OVERLOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25	27.6 ~ 32.4V
		Protection type : Shut down o/p voltage, re-power on to recover			
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 ~ 45°C)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, CB(IEC60950-1),CCC GB4943 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC 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 EN55022 (CISPR22) 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	374.2K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	129*98*38mm (L*W*H)			
	PACKING	0.41Kg; 45pcs/19.5Kg/1.24CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. 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)				