


**■ Features :**

- Universal AC input / Full range
- No load power consumption < 0.3W
- Pass energy star(CEC) level IV regulation
- Class II power (without earth pin)
- Constant current and voltage(CC,CV mode)
- 2 colors LED indicate for charging status
- Protections: Short circuit / Over load / Over voltage
- Fully enclosed plastic case
- Approvals:UL/FCC
- 2 year warranty


**SPECIFICATION**

ORDER NO.		HR18NS042	HR18NS084	HR18NS126	HR18NS168	HR18NS210	HR18NS252	HR18NS294	HR18NS336	HR18NS378	HR18NS420	
OUTPUT	DC VOLTAGE <small>Note.2</small>	4.2V	8.4V	12.6V	16.8V	21V	25.2V	29.4V	33.6V	37.8V	42V	
	RATED CURRENT	2000mA	2000mA	1500mA	1200mA	1000mA	750mA	640mA	510mA	420mA	370mA	
	CURRENT RANGE	0~ 2000mA	0 ~ 2000mA	0 ~ 1500mA	0 ~ 1200mA	0 ~ 1000mA	0 ~ 750mA	0~640mA	0~510mA	0~420mA	0~370mA	
	RATED POWER	10W	18W	18W	18W	18W	18W	18W	18W	18W	18W	
	RIPPLE & NOISE(max) <small>Note.3</small>	150mV	150mVp	200mVp	200mVp	200mVp	200mVp	200mVp	200mV	200mV	200mV	
	VOLTAGE ADJ. RANGE(V)	2.7-4.2	5.4-8.4	8.1-12.6	10.8-16.8	13.5-21	16.2-25.2	18.9-29.4	21.6-33.6	24.3-37.8	27-42	
		Fixed										
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION <small>Note.6</small>	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%
LED INDICATOR	Green LED ON : <200mA Red LED ON : >400mA of charge current											
SETUP,RISE,HOLD UP TIME	3000ms, 50ms, 16ms at full load											
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC										
	FREQUENCY RANGE	47 ~ 63Hz										
	EFFICIENCY (Typ.) <small>Note.7</small>	75%	78%	78%	80%	80%	80%	80%	80%	82%	82%	
	AC CURRENT	0.5A/100VAC										
	INRUSH CURRENT (Typ.)	50A/230VAC										
LEAKAGE CURRENT (max.)	0.25mA / 240VAC											
PROTECTION	OVER LOAD	90 ~ 110% Constant current mode Protection type : Hiccup mode, recovers automatically after fault condition is removed										
	OVER VOLTAGE	135 ~ 180% rated output voltage Protection type : Clamp by PWM IC										
ENVIRONMENT	WORKING TEMP.	0 ~ + 50℃ (Refer to output load derating curve)										
	WORKING HUMIDITY	20% ~ 90% RH non-condensing										
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃ , 10 ~ 95% RH										
	TEMP. COEFFICIENT	±0.03% /℃ (0 ~ 50℃)										
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC (Note.8)	SAFETY STANDARDS	UL60950-1, CSA 22.2, EN60950-1 Approved										
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC										
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH										
	EMICONDUCTION& RIAION	Compliance to EN55022 class B, FCC PART 15 class B										
	HARMONIC CURRENT	Compliance to EN61000-3-2,3										
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, Light industry level, criteria A											

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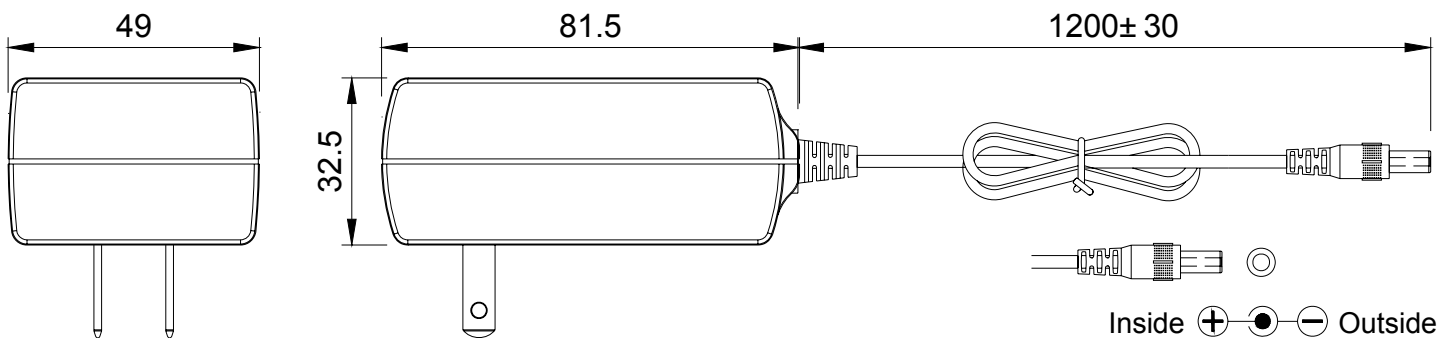
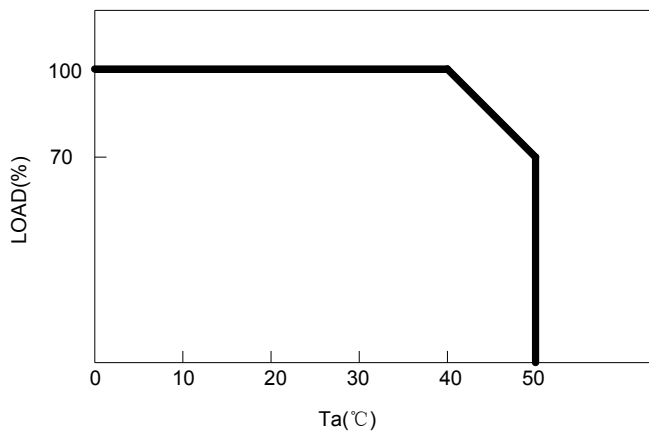
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OTHERS	MTBF	50000hrs min. MIL-HDBK-217F (25°C )
	DIMENSION	81.5*49*32.5mm (L*W*H)
	PACKING (Typ.)	120g ;
CONNECTOR	PLUG	Standard type : 2.1Φ* 5.5Φ* 11mm, tuning fork type center positive for stock ; Other type available by customer requested
	CABLE	Standard type 22Awg UL1185,Other type available by customer requested
NOTE	1.All parameters are specified at 230VAC input, rated load, 25 to 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load 7.Efficiency is measured at 230VAC. 8.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.	

**Mechanical Specification**

**Derating Curve**

**Static Characteristics**
