



■ 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 color LED indicates charging status
- Protections: Short circuit / Over load / Over voltage
- Fully enclosed plastic case
- Approvals: ETL / FCC
- 2 year warranty



SPECIFICATION

ORDER		HR20CS042	HR20CS084	HR20CS126	HR20CS168	HR20CS210	HR20CS252	HR20CS294	HR20CSAB-XYZ
OUTPUT	DC VOLTAGE Note.2	4.2V	8.4V	12.6V	16.8V	21V	25.2V	29.4V	4.2~30V
	RATED CURRENT	2500mA	2000mA	1500mA	1200mA	950mA	800mA	680mA	0~2500mA
	CURRENT RANGE	0~ 2000mA	0 ~ 2000mA	0 ~ 1500mA	0 ~ 1200mA	0 ~ 950mA	0 ~ 800mA	0~680mA	0~2500mA
	RATED POWER	10.5W	16.8W	18.9W	20W	20W	20W	20W	20W
	RIPPLE & NOISE (max) Note.3	150mV	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	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	4.2~30V
		Fixed							
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%
	LED INDICATOR	Red: charging Green: finish/standby							
SETUP, RISE, HOLD UP TIME	3000ms, 50ms, 16ms at full load								
INPUT	VOLTAGE RANGE	90 ~ 264VAC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.) Note.7	75%	78%	80%	80%	80%	80%	80%	80%
	AC CURRENT	0.6A/100VAC							
	INRUSH CURRENT (Typ.)	40A/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°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +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.8)	SAFETY STANDARDS	EN 60335-2-29: 2004 + A2:2010							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMICONDUCTION & RADIATION	Compliance to EN55014 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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20WAC-DC Wall-mounted type For Li-Ion/NI-ZN Battery Pack Charger **HR20CS series**

OTHERS	MTBF	50000hrs min. MIL-HDBK-217F (25°C)
	DIMENSION	80.7*34.1*49mm (L*W*H)
	PACKING (Typ.)	150g ;
CONNECTOR	PLUG	Standard type : 2.1Φ* 5.5Φ* 10.5mm, tuning fork type center positive for stock ; Other type available per customer request
	CABLE	Standard type 20Awg UL2468 ,Other type available per customer request
NOTE	<p>1.All parameters are specified at 230VAC input, rated load, 25 to70% 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.</p>	

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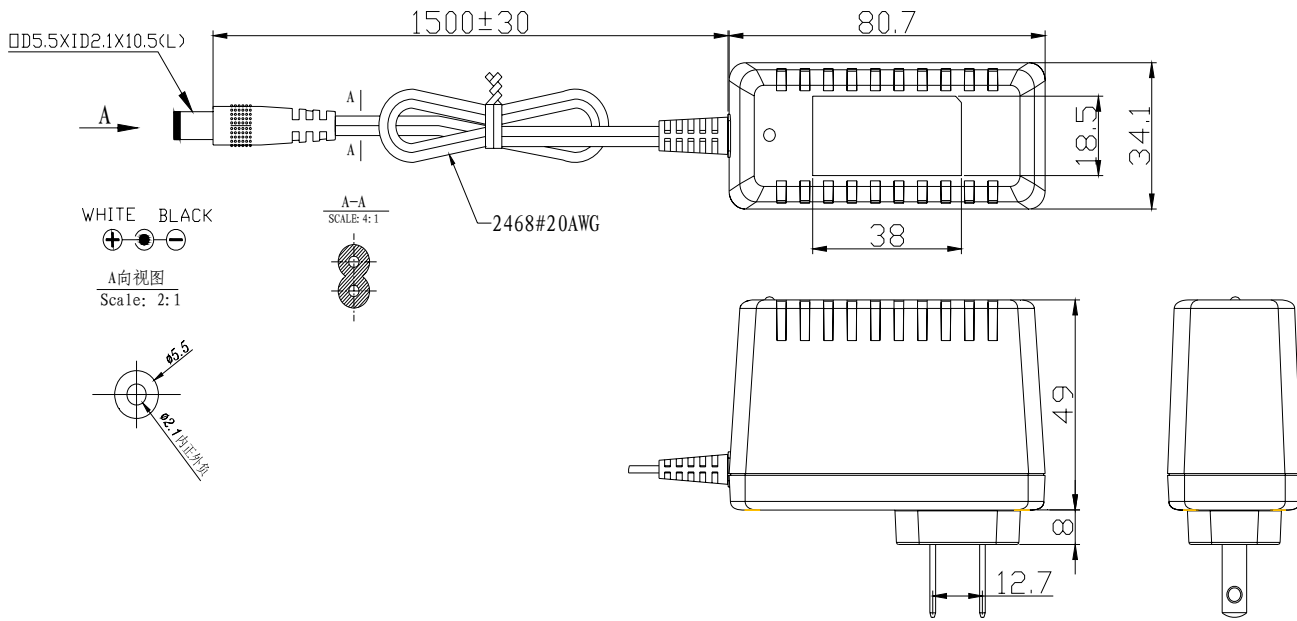
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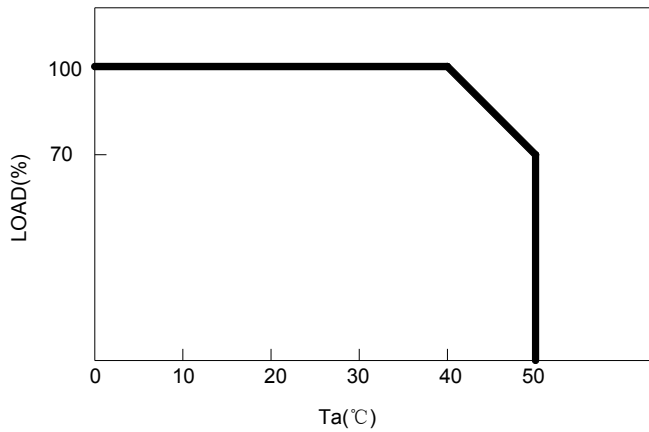
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Mechanical Specification



Derating Curve



Static Characteristics

