



### ◆ Feature

- Universal Input Switch Mode Power Supplies
- No load power consumption <0.3 Watt
- Meet energy star CEC, EUPS, MEPS level (IV) & (V)
- Protection: over voltage , over current , short circuit
- High Efficiency and Reliability
- Range output 3VDC~36VDC
- Comply to UL,CSA, GS/TUV, CE, PSE

### Specification

Input	Voltage range	90~264Vac
	Frequency range	47~63Hz
	AC current	0.8A Max. @ 230Vac
	Inrush current (max.)	30Amax. @ 230Vac, cold start
	Leakage current(max.)	0.25mA @120Vac,60Hz / 0.45mA @ 230Vac,50Hz
Protection	Over load	>105% rate output voltage power Hiccup mode, Recovery automatically
	Short circuit	Power shutdown Auto recovery after fault condition is removed
Environment	Operating Temp.	0~40°C
	Relative Humidity	20%~90% , non-condensing
	Storage Temp. / Humidity	-20°C~85°C, 10%~95% RH
	Vibration	19.6m/s <sup>2</sup> 10-55Hz, 3minutes period,60minutes each along X,Y and Z axis (Non oper
	IMPACT	196.1m/s <sup>2</sup> 11ms, once each X,Y and Z azis (Non operating)
Safety & EMC	Safety Standard	UL60950-1, EN60950-1 / EN61558 / J60950
	Withstand voltage	I/P-O/P:3KVac, 1 minute
	Isolation resistance	I/P-O/P: 100M ohms/500Vdc/25°C/70%RH
	Conducted / Radiated	EN55022 , FCC part 15 Class B
	Harmonic	EN6100-3-2
Others	MTBF	100,000 hours min. @25°C, 80% of full load. (MIL-HDBK-217F)
	Dimension	84mm *52.3mm *35mm
Note	1.All parameters are specified at 230Vac input, rated load,25°C 70% RH ambient;	
	2.DC voltage: the output voltage set at point measure by plug terminal & 100% load;	
	3.Ripple & Niose are measured at 20Mhz 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%~100% at rated load	
	7.Efficiency is measured at 110Vac or 230Vac.	

### Safety mark



## Output

Model No.	DC Voltage	Current range (mA)	Ripple & Noise	Line regulation	Load regulation	Voltage tolerance
SPA030yyyy HZ	3.0V	100 to 4000	1%	±1%	±5%	±5%
SPA033yyyy HZ	3.3V	100 to 4000	1%	±1%	±5%	±5%
SPA035yyyy HZ	3.5V	100 to 4000	1%	±1%	±5%	±5%
SPA040yyyy HZ	4.0V	100 to 4000	1%	±1%	±5%	±5%
SPA045yyyy HZ	4.5V	100 to 4000	1%	±1%	±5%	±5%
SPA050yyyy HZ	5.0V	100 to 4000	1%	±1%	±5%	±5%
SPA055yyyy HZ	5.5V	100 to 4000	1%	±1%	±5%	±5%
SPA060yyyy HZ	6.0V	100 to 4000	1%	±1%	±5%	±5%
SPA065yyyy HZ	6.5V	100 to 3500	1%	±1%	±5%	±5%
SPA070yyyy HZ	7.0V	100 to 3400	1%	±1%	±5%	±5%
SPA075yyyy HZ	7.5V	100 to 3000	1%	±1%	±5%	±5%
SPA080yyyy HZ	8.0V	100 to 2800	1%	±1%	±5%	±5%
SPA085yyyy HZ	8.5V	100 to 2700	1%	±1%	±5%	±5%
SPA090yyyy HZ	9.0V	100 to 2600	1%	±1%	±5%	±5%
SPA095yyyy HZ	9.5V	100 to 2500	1%	±1%	±5%	±5%
SPA100yyyy HZ	10.0V	100 to 2300	1%	±1%	±5%	±5%
SPA105yyyy HZ	10.5V	100 to 2250	1%	±1%	±5%	±5%
SPA110yyyy HZ	11.0V	100 to 2150	1%	±1%	±5%	±5%
SPA115yyyy HZ	11.5V	100 to 2050	1%	±1%	±5%	±5%
SPA120yyyy HZ	12.0V	100 to 2000	1%	±1%	±5%	±5%
SPA125yyyy HZ	12.5V	100 to 1900	1%	±1%	±5%	±5%
SPA130yyyy HZ	13.0V	100 to 1800	1%	±1%	±5%	±5%
SPA135yyyy HZ	13.5V	100 to 1770	1%	±1%	±5%	±5%
SPA138yyyy HZ	13.8V	100 to 1700	1%	±1%	±5%	±5%
SPA140yyyy HZ	14.0V	100 to 1650	1%	±1%	±5%	±5%
SPA145yyyy HZ	14.5V	100 to 1650	1%	±1%	±5%	±5%
SPA150yyyy HZ	15.0V	100 to 1600	1%	±1%	±5%	±5%
SPA155yyyy HZ	15.5V	100 to 1500	1%	±1%	±5%	±5%
SPA160yyyy HZ	16.0V	100 to 1500	1%	±1%	±5%	±5%
SPA165yyyy HZ	16.5V	100 to 1450	1%	±1%	±5%	±5%
SPA170yyyy HZ	17.0V	100 to 1400	1%	±1%	±5%	±5%
SPA175yyyy HZ	17.5V	100 to 1350	1%	±1%	±5%	±5%
SPA180yyyy HZ	18.0V	100 to 1300	1%	±1%	±5%	±5%
SPA185yyyy HZ	18.5V	100 to 1250	1%	±1%	±5%	±5%
SPA190yyyy HZ	19.0V	100 to 1250	1%	±1%	±5%	±5%
SPA195yyyy HZ	19.5V	100 to 1200	1%	±1%	±5%	±5%
SPA200yyyy HZ	20.0V	100 to 1200	1%	±1%	±5%	±5%
SPA205yyyy HZ	20.5V	100 to 1150	1%	±1%	±5%	±5%
SPA210yyyy HZ	21.0V	100 to 1100	1%	±1%	±5%	±5%
SPA215yyyy HZ	21.5V	100 to 1100	1%	±1%	±5%	±5%
SPA220yyyy HZ	22.0V	100 to 1090	1%	±1%	±5%	±5%
SPA225yyyy HZ	22.5V	100 to 1050	1%	±1%	±5%	±5%

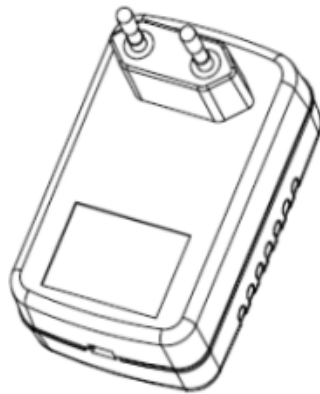
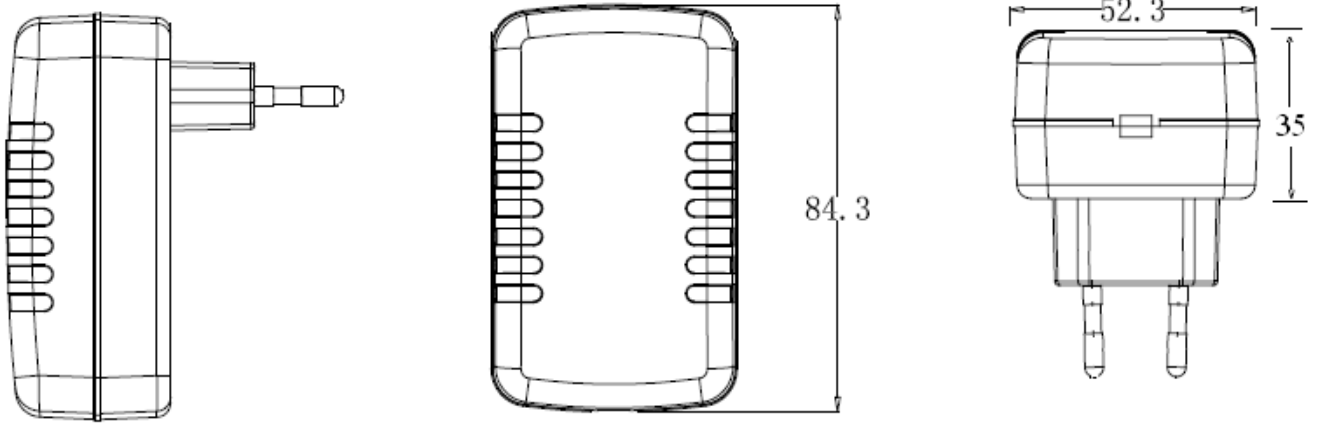
**24W series AC to DC power supply**

**Wall mount**

SPA230yyyy HZ	23.0V	100 to 1000	1%	±1%	±5%	±5%
SPA235yyyy HZ	23.5V	100 to 1000	1%	±1%	±5%	±5%
SPA240yyyy HZ	24.0V	100 to 1000	1%	±1%	±5%	±5%
SPA245yyyy HZ	24.5V	100 to 950	1%	±1%	±5%	±5%
SPA250yyyy HZ	25.0V	100 to 950	1%	±1%	±5%	±5%
SPA255yyyy HZ	25.5V	100 to 900	1%	±1%	±5%	±5%
SPA260yyyy HZ	26.0V	100 to 900	1%	±1%	±5%	±5%
SPA265yyyy HZ	26.5V	100 to 900	1%	±1%	±5%	±5%
SPA270yyyy HZ	27.0V	100 to 860	1%	±1%	±5%	±5%
SPA275yyyy HZ	27.5V	100 to 850	1%	±1%	±5%	±5%
SPA280yyyy HZ	28.0V	100 to 840	1%	±1%	±5%	±5%
SPA285yyyy HZ	28.5V	100 to 830	1%	±1%	±5%	±5%
SPA290yyyy HZ	29.0V	100 to 820	1%	±1%	±5%	±5%
SPA295yyyy HZ	29.5V	100 to 810	1%	±1%	±5%	±5%
SPA300yyyy HZ	30.0V	100 to 800	1%	±1%	±5%	±5%
SPA305yyyy HZ	30.5V	100 to 750	1%	±1%	±5%	±5%
SPA310yyyy HZ	31.0V	100 to 750	1%	±1%	±5%	±5%
SPA315yyyy HZ	31.5V	100 to 750	1%	±1%	±5%	±5%
SPA320yyyy HZ	32.0V	100 to 740	1%	±1%	±5%	±5%
SPA325yyyy HZ	32.5V	100 to 730	1%	±1%	±5%	±5%
SPA330yyyy HZ	33.0V	100 to 720	1%	±1%	±5%	±5%
SPA335yyyy HZ	33.5V	100 to 710	1%	±1%	±5%	±5%
SPA340yyyy HZ	34.0V	100 to 700	1%	±1%	±5%	±5%
SPA345yyyy HZ	34.5V	100 to 680	1%	±1%	±5%	±5%
SPA350yyyy HZ	35.0V	100 to 670	1%	±1%	±5%	±5%
SPA355yyyy HZ	35.5V	100 to 660	1%	±1%	±5%	±5%
SPA360yyyy HZ	36.0V	100 to 670	1%	±1%	±5%	±5%

**Definition of variables :**

Variable :	Range of variable :	Content
xxx	030-360	3 digits, 10 times of output voltage in Voltage. eg : 030=3Vdc, 360=36Vdc
yyyy	0100-4000	4 digits, 1 times of output current in Ampere eg: 0100=100mA, 4000=4000mA
HZ	WB,WE, IB,IE, Blank, BS, EU	Represents the type of different enclosure for the product. ( HZ=WB, represents the product is direct plug-in type, British plug ; HZ=WE, represents the product is direct plug-in type, European plug; HZ=IB, represents the product is detachment type, British plug; HZ=IE, represents the product is detachment type, European plug; HZ=blank, represents the product is desk-top type, which has no AC power cord; HZ=BS, represents the product is cord to cord type, which has AC power cord, British plug; HZ=EU, represents the product is cord to cord type, which has AC power cord,European plug. )



EU STANDARD PLUG



UK STANDARD PLUG



US STANDARD PLUG  
JAPAN STANDARD PLUG



CHINA STANDARD PLUG



AUSTRALIA STANDARD PLUG

Note:1. All dimensions in mm.

2. Detail mechanical drawing upon request.

Safety mark

