



**Sparkle Power Inc.**  
A Leading Power Supply  
Manufacturer Website:  
[www.sparklepower.com](http://www.sparklepower.com)



## SPI450ACAG

**(80PLUS Gold, RoHS Compliant)**

**450 Watts ATX12V 2.3 Switching Power Supply  
Meet 2010 ErP**

### Features

- Complied with ATX12V 2.3 standard
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Compatible with European Union Directive 2002/95/EC (Restriction on Hazardous Substances).
- Remote ON/OFF function
- Internal 12V DC fan included
- Noise Killer (thermal fan speed control function)
- Low noise and ripple
- Output over voltage, short circuit, and over current protection
- 100% Hi-pot, ATE, and burn-in tested
- Re-settable power shut down
- Complies with FCC part 15 subpart J class B 115Vac operation, and CISPR 22 class B at 230Vac operation
- Approved by CUL/UL60950-1, TUV EN60950-1, CB 60950-1 report, FCC, EMC.

### Input Characteristics

**Input Range:** 90 ~ 264Vac, Full Range Input

**Frequency:** 47 ~ 63Hz

**Input Current:** Max 6A @ 115Vac, 3A @ 230Vac

**Inrush Current:** No damage.

### Output Characteristics

	MINIMUM LOAD	NORMAL LOAD	MAXIMUM LOAD	LOAD REG.	LINE REG.	RIPPLE & NOISE
<b>+3.3V</b>	<b>0.1A</b>	<b>12A</b>	<b>24/3A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>
<b>+5V</b>	<b>0.2A</b>	<b>12A</b>	<b>11/24A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>
<b>+12V1</b>	<b>0.1A</b>	<b>8A</b>	<b>18A</b>	<b>±5%</b>	<b>±1%</b>	<b>120mV P-P</b>
<b>+12V2</b>	<b>0A</b>	<b>8A</b>	<b>18A</b>	<b>±5%</b>	<b>±1%</b>	<b>120mV P-P</b>
<b>-12V</b>	<b>0A</b>	<b>0.15A</b>	<b>0.3A</b>	<b>±10%</b>	<b>±2%</b>	<b>200mV P-P</b>
<b>+5Vsb</b>	<b>0A</b>	<b>1.5A</b>	<b>3A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>

\*+12V1,2,3,4 Peak current is 20A (less than 10mS)

\*+5V<sub>sb</sub> peak current is 4A (less than 0.5S)

\*+3.3V & +5V total output does not exceed 130W  
when +5V is loaded to 24A, then +3.3V maximum load is 3A

when +3.3V is loaded to 24A, then +5V maximum load is 10A  
\*+12V1 & +12V2 total output does not exceed 420W(35A)

**Sparkle Power Inc.**

**Main Office**

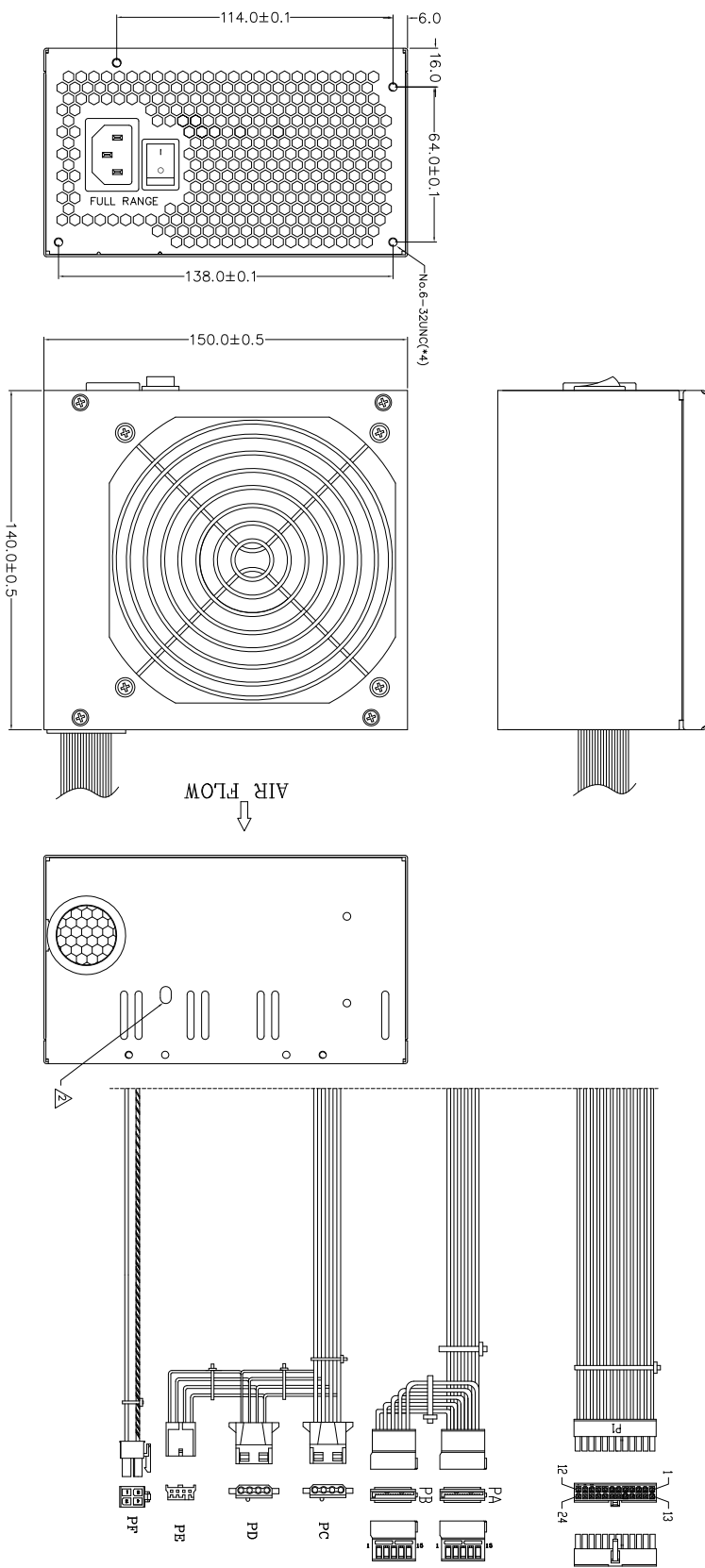
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**Sparkle Power Inc.**

**Los Angeles Office**

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WIRE NO.	SIGNAL	WIRE COLOR	CONDUCTOR TYPE	CABLE LENGTH
1	+3.3VDC	ORANGE	18 AWG 300	400 ±38 mm
2	+3.3VDC	ORANGE	18 AWG 300	
3	+5VDC	RED	18 AWG 300	
4	+5VDC	RED	18 AWG 300	
5	COM	BLACK	18 AWG 300	150±10mm
6	+5VDC	RED	18 AWG 300	
7	COM	BLACK	18 AWG 300	
8	+5VDC	RED	18 AWG 300	
9	+5VDC	RED	18 AWG 300	300 ±38 mm
10	+5VDC	RED	18 AWG 300	
11	+5VDC	RED	18 AWG 300	
12	+5VDC	RED	18 AWG 300	
13	+5VDC	RED	18 AWG 300	150±10mm
14	+5VDC	RED	18 AWG 300	
15	+5VDC	RED	18 AWG 300	
16	+5VDC	RED	18 AWG 300	
17	+5VDC	RED	18 AWG 300	300 ±38 mm
18	+5VDC	RED	18 AWG 300	
19	+5VDC	RED	18 AWG 300	
20	+5VDC	RED	18 AWG 300	
21	+5VDC	RED	18 AWG 300	150±10mm
22	+5VDC	RED	18 AWG 300	
23	+5VDC	RED	18 AWG 300	
24	+5VDC	RED	18 AWG 300	
25	+5VDC	RED	18 AWG 300	300 ±38 mm
26	+5VDC	RED	18 AWG 300	
27	+5VDC	RED	18 AWG 300	
28	+5VDC	RED	18 AWG 300	
29	+5VDC	RED	18 AWG 300	150±10mm
30	+5VDC	RED	18 AWG 300	
31	+5VDC	RED	18 AWG 300	
32	+5VDC	RED	18 AWG 300	
33	+5VDC	RED	18 AWG 300	300 ±38 mm
34	+5VDC	RED	18 AWG 300	
35	+5VDC	RED	18 AWG 300	
36	+5VDC	RED	18 AWG 300	
37	+5VDC	RED	18 AWG 300	150±10mm
38	+5VDC	RED	18 AWG 300	
39	+5VDC	RED	18 AWG 300	
40	+5VDC	RED	18 AWG 300	



UNIT:mm

- NOTE:
1. ALL THE LENGTH OF OUTPUT WIRES EXCLUDE HOUSING.
  2. 產地標籤依業務指示加貼。

SPI P/N:SPI450ACAG

MODEL NO. : SPI450ACAG	TITLE: ASSY	SHEET: 1 OF 1	REV:02
R&D(1)	PE	DRAWN	DATE
			NDV.10.2010

Mechanical Drawing(外觀/機構圖)表單編號7000P-0111