



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



## SPI600A8AG

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

**600 Watts ATX12V 2.3 and EPS 12V 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
+3.3V	0.1A	10A	24/6A	±5%	±1%	50mV P-P
+5V	0.2A	10A	12.1/24A	±5%	±1%	50mV P-P
+12V1	0.1A	8A	18A	±5%	±1%	120mV P-P
+12V2	0A	8A	18A	±5%	±1%	120mV P-P
+12V3	0A	8A	18A	±5%	±1%	120mV P-P
+12V4	0A	8A	18A	±5%	±1%	120mV P-P
-12V	0A	0.25A	0.5A	±10%	±2%	200mV P-P
+5Vsb	0A	1.5A	3.5A	±5%	±1%	50mV P-P

### Specification

- **Temperature Range:** Operating: +0°C ~ +40°C on full load  
Storage & Shipping: -40°C ~ +70°C
- **Humidity:** 5-85% on operating, 5-95% on storage
- **Dielectric Withstand:** Primary to frame ground 1800V<sub>AC</sub> for 1 second
- **Efficiency:** 87% minimum, typical up to 90%
- **Rise time:** Less than 20ms
- **Hold-up Time:** 17ms minimum at nominal input voltage
- **Power Good Signal:** Power on delay time 100 ~ 500ms, off delay 1ms minimum (TTL and CMOS compatible)
- **Leakage Current:** Less than 3.5mA at 264Vac, 50Hz
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 140x150x86.0mm / 5.5x5.9x3.4inch

\*+3.3V & +5V total output does not exceed 140W  
when +5V is loaded to 24A, then +3.3V maximum load is 6A  
when +3.3V is loaded to 24A, then +5V maximum load is 12A  
\*+12V1 & +12V2 total output does not exceed 540W(45A)

**Sparkle Power Inc.**

**Main Office**

1000 Rock Avenue  
San Jose, CA 95131  
TEL: 408-519-8888  
FAX: 408-519-9999  
E-MAIL: [info@sparklepower.com](mailto:info@sparklepower.com)

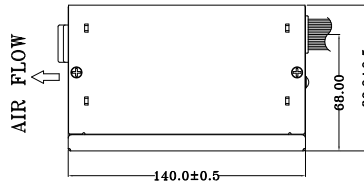
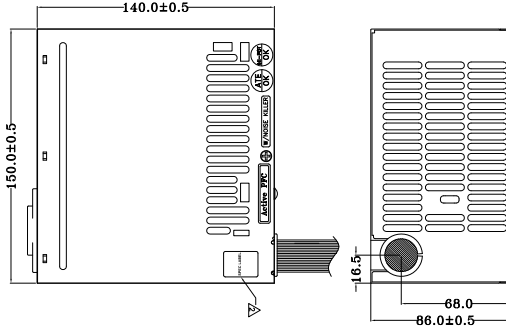
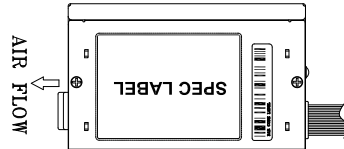
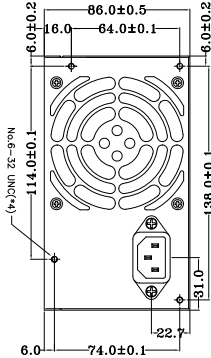
**Sparkle Power Inc.**

**Los Angeles Office**

17071 Green Drive  
City of Industry, CA 91745  
TEL: 626-839-7180  
FAX: 626-839-3395

REF. ID	PIN	SIGNAL	WIRE COLOR	WIRE TYPE	CONNECTION	CABLE LENGTH
P1	1	+3.3VDC	ORANGE	18	WALL	500 ±2mm
	2	+3.3VDC	ORANGE	18	or decv.	
	3	COM	BLACK	18	or decv.	
	4	+5VDC	RED	18		
	5	COM	BLACK	18		
	6	+5VDC	RED	18		
	7	COM	BLACK	18		
	8	PS-ON	GRAY	24		
	9	-5Vsb	PURPLE	18		
	10	+12V1	YELLOW	18		
	11	+12V1	YELLOW	18		
	12	+3.3VDC	ORANGE	18		
	13	+3.3VDC	ORANGE	18		
	14	+18VDC	BROWN	24		
	15	COM	BLACK	18		
	16	PS-ON	GREEN	24		
	17	COM	BLACK	18		
	18	COM	BLACK	18		
	19	COM	BLACK	18		
	20					
	21	+5VDC	RED	18		
	22	+5VDC	RED	18		
	23	+5VDC	RED	18		
	24	COM	BLACK	18		
P2	1	COM	BLACK	18	WALL	500 ±2mm
	2	COM	BLACK	18	or decv.	
	3	COM	BLACK	18	or decv.	
	4	COM	BLACK	18	or decv.	
PA	1	+12V1	YEL/BLACK	18	WALL	550 ±2mm
	2	+12V1	YEL/BLACK	18	or decv.	
	3	-5V	RED	18	or decv.	
	4	COM	BLACK	18	or decv.	
PB	1	+12V1	YEL/BLACK	18	WALL	100±10mm
	2	+12V1	YEL/BLACK	18	or decv.	
	3	-5V	RED	18	or decv.	
	4	COM	BLACK	18	or decv.	
PC	1	+3.3V	ORANGE	18	WALL	400 ±2mm
	2	COM	BLACK	18	or decv.	
	3	-5V	RED	18	or decv.	
	4	COM	BLACK	18	or decv.	
PD	1	+3.3V	ORANGE	18	WALL	250±10mm
	2	COM	BLACK	18	or decv.	
	3	-5V	RED	18	or decv.	
	4	COM	BLACK	18	or decv.	
P3	1	+12V1	YELLOW	18	AMP	100±10mm
	2	COM	BLACK	22	or decv.	
	3	COM	BLACK	22	or decv.	
	4	+12V1	YELLOW	18	or decv.	
P4	1	+12V1	YELLOW	18	AMP	550 ±2mm
	2	COM	BLACK	18	or decv.	
	3	COM	BLACK	18	or decv.	
	4	-5V	RED	18	or decv.	
P5	1	+12V1	YELLOW	18	AMP	100±10mm
	2	COM	BLACK	18	or decv.	
	3	COM	BLACK	18	or decv.	
	4	-5V	RED	18	or decv.	
P6	1	+12V1	YELLOW	22	AMP	100±10mm
	2	COM	BLACK	22	or decv.	
	3	COM	BLACK	22	or decv.	
	4	-5V	RED	22	or decv.	
P7	1	+12V1	YEL/WHITE	18	WALL	450 ±2mm
	2	+12V1	YEL/WHITE	18	or decv.	
	3	COM	BLACK	18	or decv.	
	4	COM	BLACK	18	or decv.	
P9	1	+12V3	YEL/BLUE	18	WALL	450 ±2mm
	2	+12V3	YEL/BLUE	18	or decv.	
	3	+12V3	YEL/BLUE	18	or decv.	
	4	COM	BLACK	18	or decv.	
P8	1	+12V4	YEL/WHITE	30	WALL	100±10mm
	2	+12V4	YEL/WHITE	30	or decv.	
	3	+12V4	YEL/WHITE	30	or decv.	
	4	COM	BLACK	30	or decv.	
P10	1	+12V3	YEL/BLUE	30	WALL	100±10mm
	2	+12V3	YEL/BLUE	30	or decv.	
	3	+12V3	YEL/BLUE	30	or decv.	
	4	COM	BLACK	30	or decv.	

UNIT:mm



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

MODEL NO. :		TITLE: ASSY		SHEET: 1 OF 1	REV:02
R&D(1)	PE	DRAWN	DATE		
			APR.18.2011		

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

