



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



## SPI700ACAG

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

**700 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>28/6A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>
<b>+5V</b>	<b>0.2A</b>	<b>12A</b>	<b>13.5/28A</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>+12V3</b>	<b>0A</b>	<b>8A</b>	<b>18A</b>	<b>±5%</b>	<b>±1%</b>	<b>120mV P-P</b>
<b>+12V4</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>0.25A</b>	<b>0.5A</b>	<b>±10%</b>	<b>±2%</b>	<b>200mV P-P</b>
<b>+5Vsb</b>	<b>0A</b>	<b>1.5A</b>	<b>3.5A</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 160W when +5V is loaded to 28A, then +3.3V maximum load is 6A

when +3.3V is loaded to 28A, then +5V maximum load is 13.5A

\*+12V1 & +12V2 & +12V3 & +12V4 total output does not exceed 672W(56A)

### 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):** 140x150x85.8mm / 5.5x5.9x3.4inch

**Sparkle Power Inc.**

**Main Office**

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**Sparkle Power Inc.**

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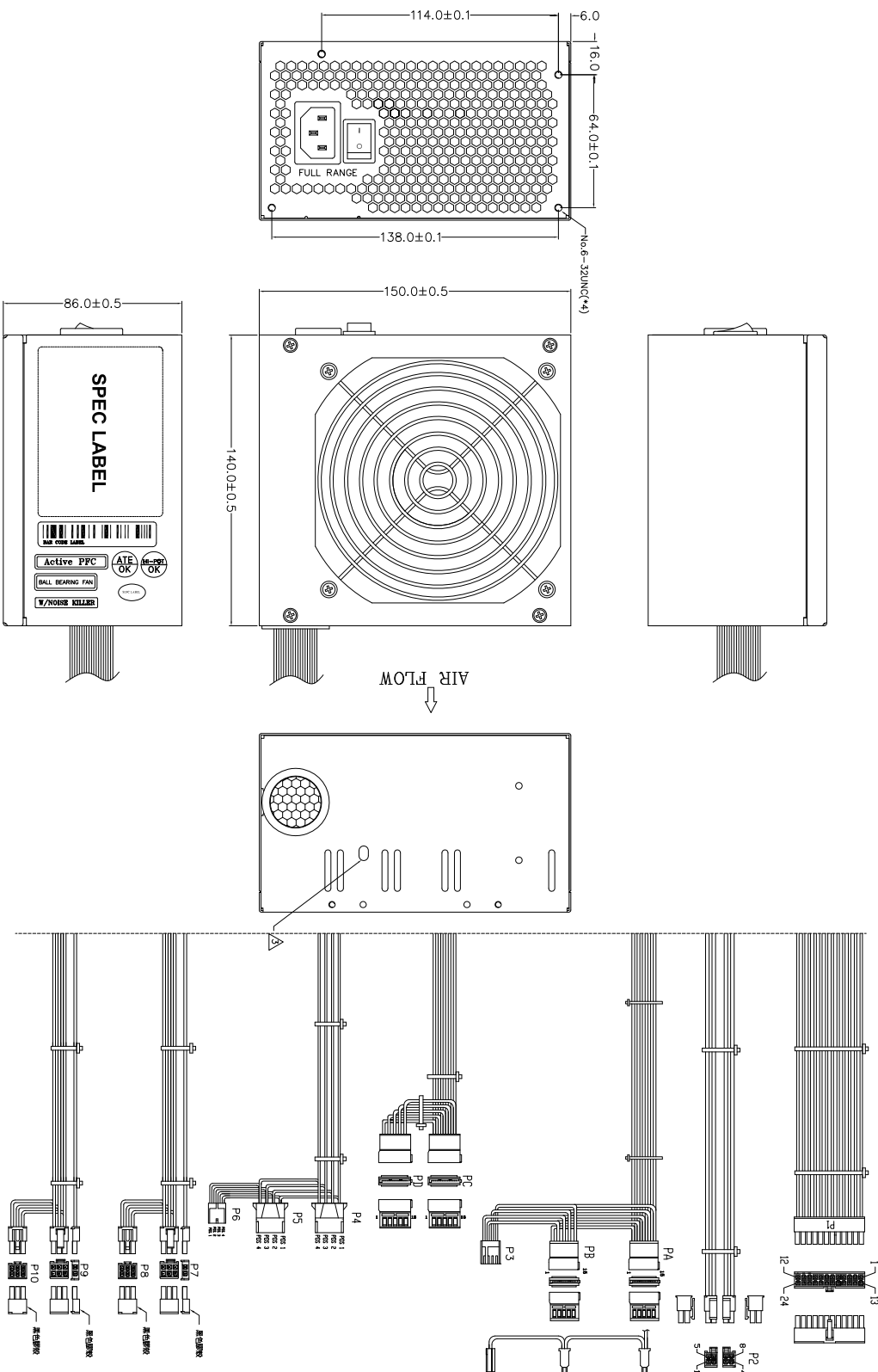
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LINE NO.	QTY	DESCRIPTION	WIRE COLOR	SIZE	CONNECTION	UNIT
P1	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P2	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P3	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P4	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P5	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P6	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P7	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P8	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		
P10	1	1-330VC ORANGE	ORANGE	18	Pin 1-1400000000	500 ± 0.2mm
	2	1-330VC ORANGE	ORANGE	18	Pin 4-4840 or 200V	
	3	COOL	BLACK	18		
	4	+5VDC	RED	18		
	5	+5VDC	RED	18		
	6	+5VDC	RED	18		
	7	COOL	BLACK	18		
	8	TVS-DIODE	GRAY	24		
	9	TVS-DIODE	GRAY	24		
	10	+12V	YELLOW	18		

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. :	R&D(1)	PE	TITLE: ASSY	DRAWN	SHEET: 1 OF 1	REV:03
					DATE	NDV.10.2010

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