



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

**FSP250-601U (Active PFC & RoHS Compliant)**  
**250 Watts, ATX12V, 1U Switching Power Supply**



**Features**

- Complied with ATX and ATX12V standard
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Remote ON/OFF function
- Internal 12V DC fan included
- Noise Killer (thermal fan speed control function)
- Low noise and ripple
- Complies with FCC part 15 subpart J class B 115Vac operation, and CISPR 22 class B at 230Vac operation
- Output over voltage, short circuit, and over current protection
- 100% Hi-pot, ATE, and burn-in tested
- Re-settable power shut down
- Approved by UL60950-1, CSA C22.2 NO. 60950, TUV EN60950 or VDE EN60950, NEMKO EN60950 (CB Report),

**Input Characteristics**

**Input Range:** 90 ~ 264Vac (RMS), Full Range Input

**Frequency:** 47 ~ 63Hz

**Input Current:** 5A (RMS) @115Vac, 2.5A (RMS) @230Vac

**Inrush Current:** 50A Max @115Vac, 80A Max @230Vac cold start

**Output Characteristics**

Output Voltage	Minimum Load	Maximum Load	Peak	Load Reg.	Line Reg.	Ripple & Noise
+3.3V	0.3A	16.0A		± 5%	± 1%	50mV P-P
+5V	2.0A	25.0A		± 5%	± 1%	50mV P-P
+12V	0.2A	13.0A	16A	± 5%	± 1%	120mV P-P
-5V	0.0A	0.3A		± 5%	± 1%	100mV P-P
-12V	0.0A	0.8A		± 5%	± 2%	120mV P-P
+5Vsb	0.0A	2.0A		± 5%	± 1%	100mV P-P

\*+5V and +3.3V total output not exceed 145W

\*+3.3V, +5V, and +12V total output cannot exceed 230W

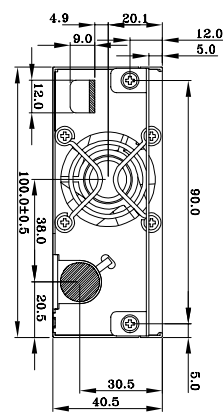
\* This subject power supply is 250W

**Specification**

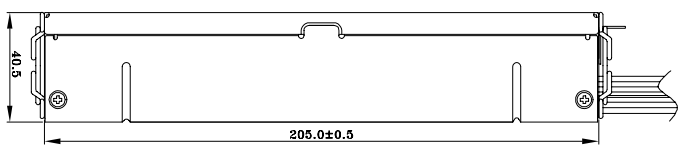
- **Temperature Range:** Operating: 0°C ~ +50°C on full load; storage & shipping: -20°C ~ +80°C
- **Humidity:** 5 ~ 95% on operating and storage
- **Dielectric Withstand:** Input to frame ground 1800 VAC for 1 second
- **Efficiency:** 68% at minimum measured at nominal AC main voltage and frequency with maximum load on all outputs
- **Rise time:** Less than 20ms
- **Hold-up Time:** 20ms minimum at nominal input voltage
- **Power Good Signal:** Power on delay time 100 ~ 500ms, off delay 1ms minimum (TTL and CMOS compatible)
- **Leakage Current:** Not exceed 3.5mA at 264Vac, 50Hz
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 205x100x40.5mm/8x3.9x1.6in

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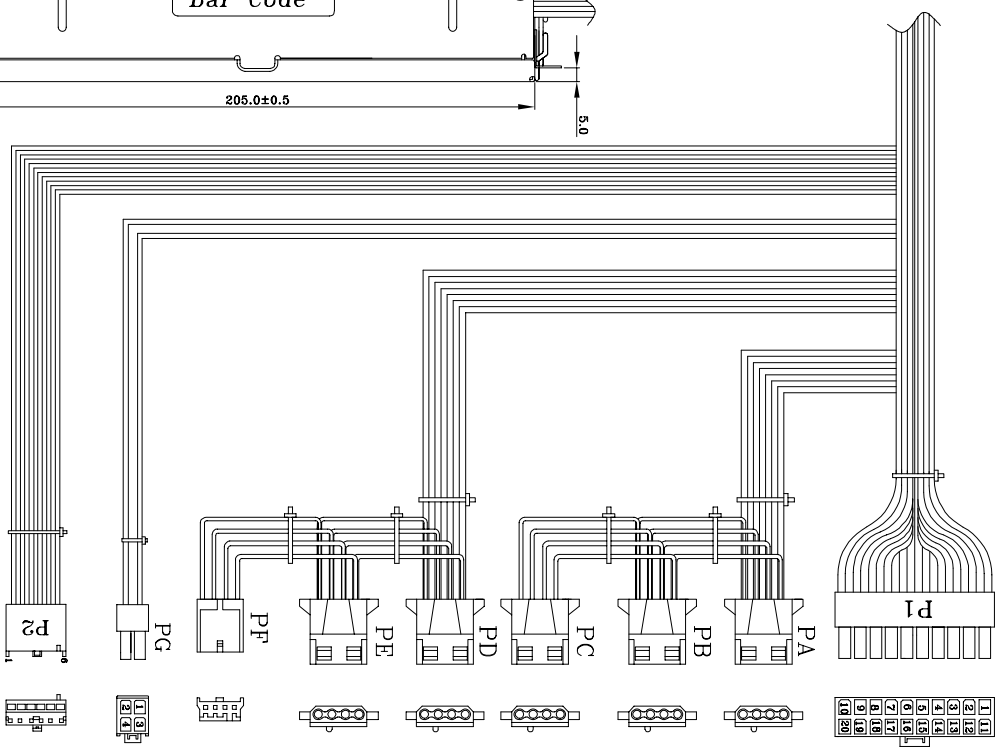
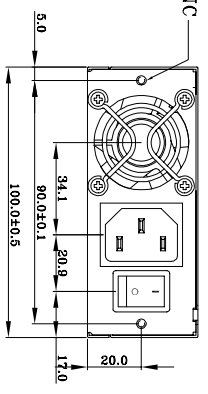
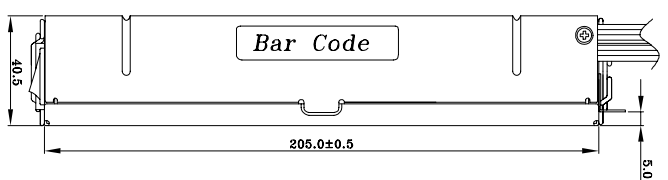
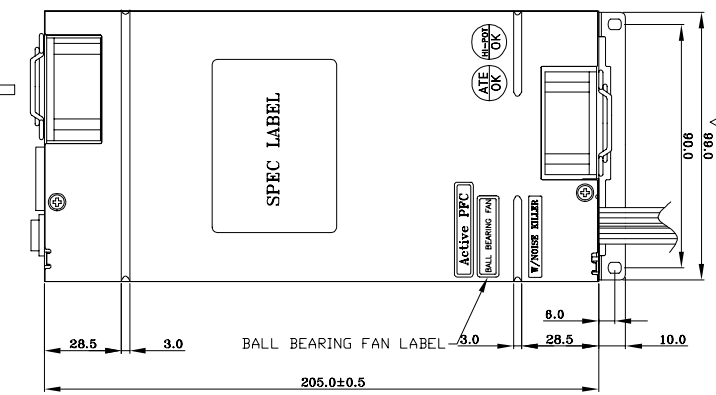
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AIR FLOW



AIR FLOW



REF. ID.	PIN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	CABLE LENGTH		
P1	1	+3.3VDC	ORANGE	18	MOLEX 39-01-2206 or BQIV.	480±15mm		
	2	+3.3VDC	ORANGE	18				
	3	COM	BLACK	18				
	4	+5VDC	RED	18				
	5	COM	BLACK	18				
	6	+5VDC	RED	18				
	7	COM	BLACK	18				
	8	PW-OK	GRAY	22				
	9	+5VSB	PURPLE	18				
	10	+12VDC	YELLOW	18				
	11	+3.3 VDC	ORANGE	18				
	12	-12VDC	BROWN	22				
	13	COM	BLACK	18				
	14	PS-ON	GREEN	22				
	15	COM	BLACK	18				
	16	COM	BLACK	18				
	17	COM	BLACK	18				
	18	-5VDC	WHITE	22				
	19	+5VDC	RED	18				
	20	+5VDC	RED	18				
PA	1	12V	YELLOW	18	AMP -480424-0480±15mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+5V	RED	18				
	1	+12V	YELLOW	18			AMP -480424-0150±15mm or BQIV.	
	2	COM	BLACK	18				
3	COM	BLACK	18					
4	+5V	RED	18					
PB	1	+12V	YELLOW	18	AMP -480424-0150±10mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+5V	RED	18				
PC	1	+12V	YELLOW	18	AMP -480424-0150±15mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+5V	RED	18				
PD	1	+12V	YELLOW	18	AMP -480424-0480±10mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+5V	RED	18				
PE	1	+12V	YELLOW	18	AMP -480424-0150±15mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+5V	RED	18				
PF	1	+12V	YELLOW	22	AMP 171822-4 150±10mm or BQIV.			
	2	COM	BLACK	22				
	3	COM	BLACK	22				
	4	+5V	RED	22				
PG	1	COM	BLACK	20	MOLEX 90331-480±15mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	BLACK	18				
	4	+12V	YELLOW	20				
P2	1	COM	BLACK	18	MOLEX 90331-480±15mm or BQIV.			
	2	COM	BLACK	18				
	3	COM	ORANGE	18				
	4	+3.3VDC	ORANGE	18				
	5	+3.3VDC	ORANGE	18				
	6	+5V	RED	18				

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

MODEL NO. : FSP250-601U(S03G)	TITLE: ASSY	SHEET: 1 OF 1	REV: 01
R&D	PE	DRAWN	DATE
INTERIOR COUNTERSIGN:			Sep.19.2005
			黃鈺婷

FSP P/N.:9PA2503732  
 SPI P/N.:FSP250-601UR