



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



**FSP500-80BU (Active PFC & RoHS Compliant)**  
**500 Watts, ATX12V, EPS12V, 1U Switching Power Supply**

**Features**

- Complied with ATX, ATX12V and EPS12V 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, CSA C22.2 NO. 60950, TUV EN60950 or VDE EN60950, NEMKO EN60950 (CB Report), CE

**Input Characteristics**

**Input Range:** 90 ~ 265Vac (RMS), Full Range Input  
**Frequency:** 47 ~ 63Hz  
**Input Current:** 9A (RMS) @115Vac, 5A (RMS) @230Vac  
**Inrush Current:** 80A Max @115Vac, 120A Max @230Vac cold start

**Output Characteristics**

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Line Reg.	Ripple & Noise
+3.3V	0.2A	30A	± 5%	± 1%	50mV P-P
+5V	0.2A	30A	± 5%	± 1%	50mV P-P
+12V1	0.2A	15A	± 5%	± 1%	120mV P-P
+12V2	0.2A	15A	± 5%	± 1%	120mV P-P
+12V3	0.2A	18A	± 5%	± 1%	120mV P-P
-5V	0.0A	0.3A	± 10%	± 1%	120mV P-P
-12V	0.0A	0.8A	± 10%	± 2%	120mV P-P
+5Vsb	0.0A	2.0A	± 5%	± 1%	50mV P-P

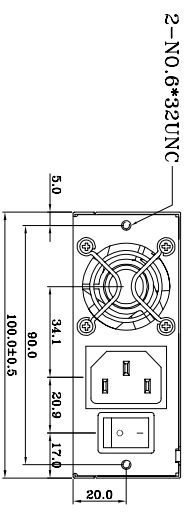
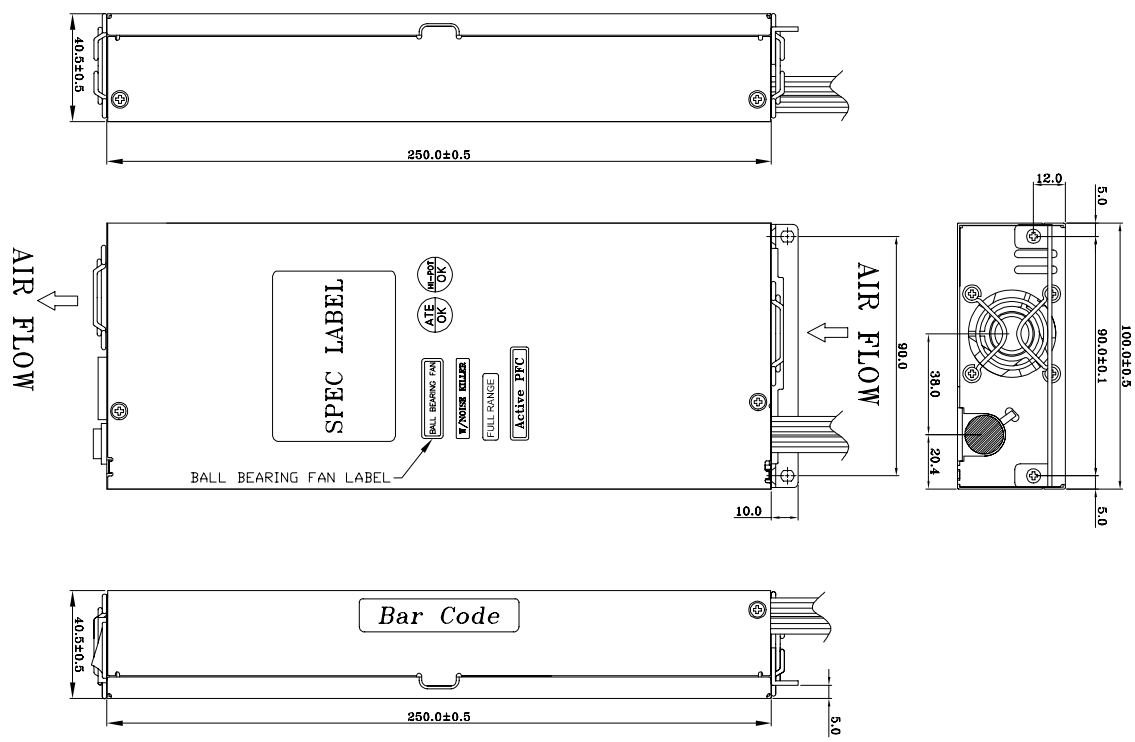
\*+5V and +3.3V total output not exceed 220W  
 \*+3.3V, +5V, and +12V total output cannot exceed 480W(+12V Outputs shall not exceed 40A)  
 \* This subject power supply is 500W

**Specification**

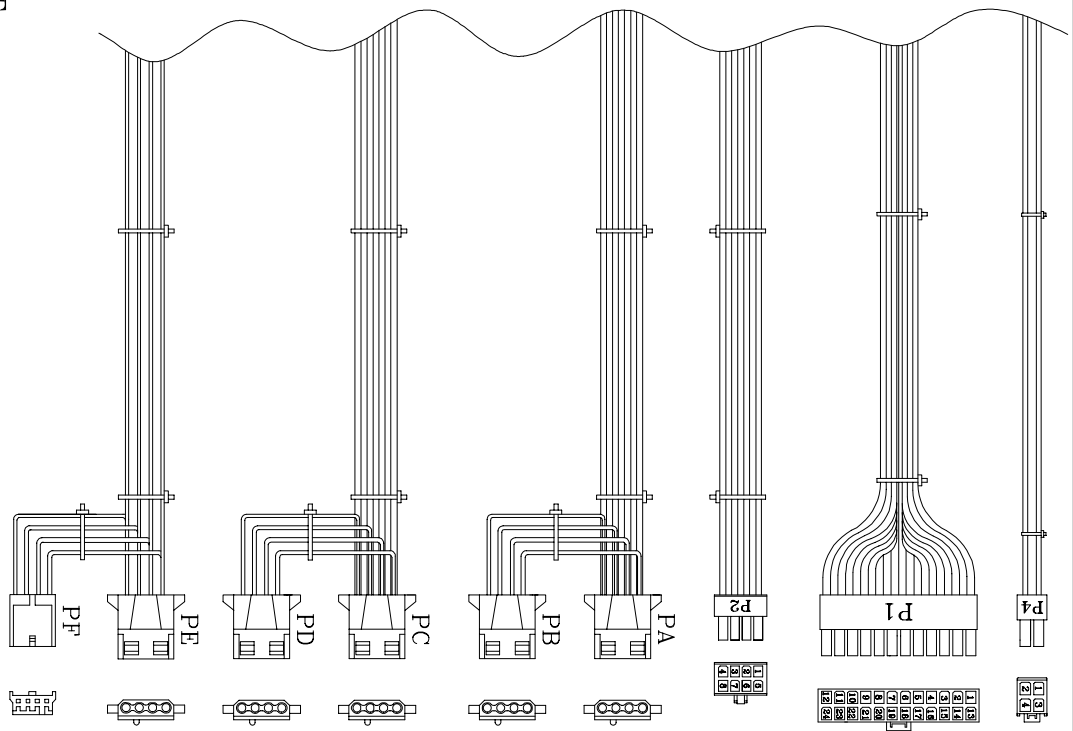
- **Temperature Range:** Operating: 0°C ~ +50°C on full load; storage & shipping: -20°C ~ +80°C
- **Humidity:** 5 ~ 95% on operating and storage
- **Dielectric Withstand:** Input to frame ground 1800 VAC for 1 second
- **Efficiency:** 70% at minimum measured at nominal AC 115VAC with maximum load on all outputs
- **Rise time:** Less than 50ms
- **Hold-up Time:** 18ms 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):** 250x100x40.5mm/10x4x1.6inch

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



REF. ID.	PN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	CABLE LENGTH
1	+3.3VDC	ORANGE	18		MOLEX	
2	+3.3VDC	ORANGE	18		39-01-2240	695±15mm
3	COM	BLACK	18		or EQUIV.	
4	+5VDC	RED	18			
5	COM	BLACK	18			
6	+5VDC	RED	18			
7	COM	BLACK	18			
8	PW-ON	GRAY	18			
9	+5Vsb	PURPLE	18			
10	+12V1	Yel./Blue	18			
11	+12V2	Yel./Blue	18			
12	+3.3VDC	ORANGE	18			
13	+3.3VDC	ORANGE	18			
14	+3.3VDC	BROWN	22			
15	-12VDC	BLUE	18			
16	COM	BLACK	18			
17	P5-ON	GREEN	18			
18	COM	BLACK	18			
19	COM	BLACK	18			
20	-5VDC	WHITE	18			
21	+5VDC	RED	18			
22	+5VDC	RED	18			
23	+5VDC	RED	18			
24	COM	BLACK	18			
1	+12V1	Yel./Black	18		AMP	
2	COM	BLACK	18		1-480424-0530±15mm	
3	COM	BLACK	18		or EQUIV.	
4	+5V	RED	18			
1	+12V1	Yel./Black	18		AMP	
2	COM	BLACK	18		1-480424-0530±15mm	
3	COM	BLACK	18		or EQUIV.	
4	+5V	RED	18			
1	+12V1	Yel./Black	18		AMP	
2	COM	BLACK	18		1-480424-0150±10mm	
3	COM	BLACK	18		or EQUIV.	
4	+5V	RED	18			
1	+12V1	Yel./Black	18		AMP	
2	COM	BLACK	18		1-480424-0530±15mm	
3	COM	BLACK	18		or EQUIV.	
4	+5V	RED	18			
1	+12V1	Yel./Black	18		AMP	
2	COM	BLACK	18		171822-4	150±10mm
3	COM	BLACK	22		or EQUIV.	
4	+5V	RED	22			
1	COM	BLACK	18			
2	COM	BLACK	18		MOLEX	
3	COM	BLACK	18		39-01-2090695±15mm	
4	+12V3	Yel./White	18		or EQUIV.	
5	+12V3	Yel./White	18			
6	+12V3	Yel./White	18			
7	+12V3	Yel./White	18			
8	+12V3	Yel./White	18			
1	COM	BLACK	18		MOLEX	
2	COM	BLACK	18		39-01-2040	695±15mm
3	+12V3	Yel./White	18		or EQUIV.	
4	+12V3	Yel./White	18			

FSP P/N.:9PB5000112  
 SPI P/N.:FSP500-80BUR

MODEL NO. : FSP500-80BU(S038)	TITLE: ASSY	SHEET: 1 OF 1	REV:02
R&D	PE	DRAWN	DATE
INTERIOR COUNTERSIGN:			Oct.05.2005
			黃鈺婷

UNIT:mm